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Visual Instruction News

CONTENTS

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Motivation of English Through Films, Slides, and Pictures

Visual Education in Elgin Public Schools

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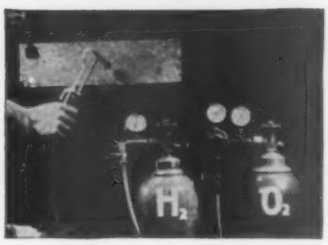

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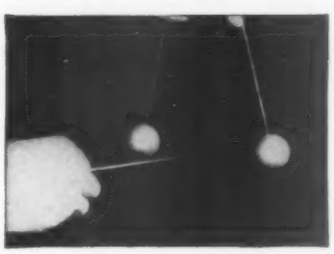

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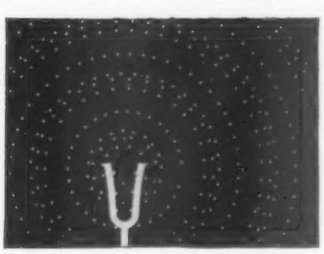

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Mass. Institute of Technology
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Senior High School, Owensboro, Ky.
Baptist Bible Institute, New Orleans, La.
Friends School, Baltimore, Md.
Towson Normal School, Baltimore, Md.
Abbot Academy, Andover, Mass.
Harvard Medical School, Boston, Mass.
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Central Jr. High School, Quincy, Mass.
Board of Education, Hackensack, N. J.
Roseland School, Roseland, N. J.
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Board of Education, Morgan, Utah
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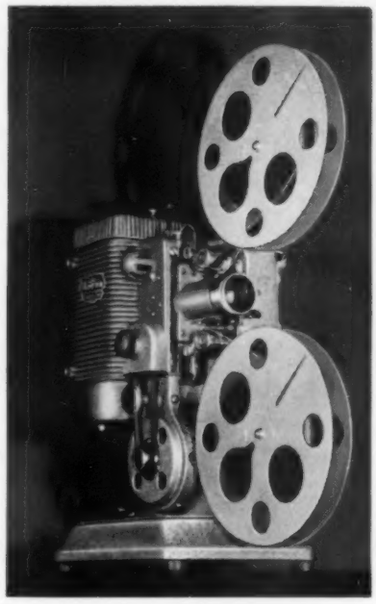
Roosevelt High School, Des Moines, Iowa
Rhode Island School of Design, Providence, R. I.
Emerson Jr. High School, Flint, Michigan
Cathedral High School, St. Cloud, Minn.



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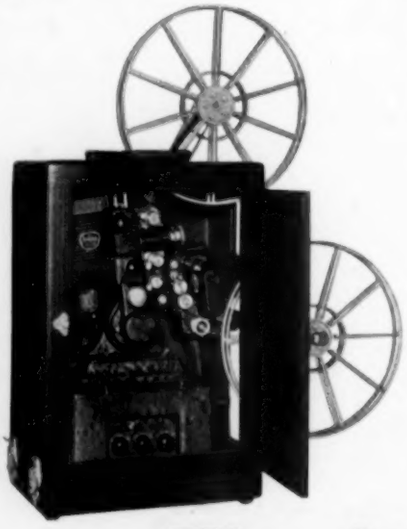

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Educational Screen

Combined with

Visual Instruction News

FEBRUARY, 1935

VOLUME XIV NUMBER 2

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THE EDUCATIONAL SCREEN, Inc.

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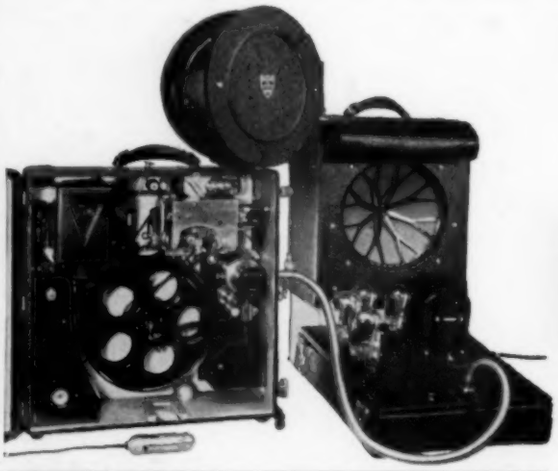

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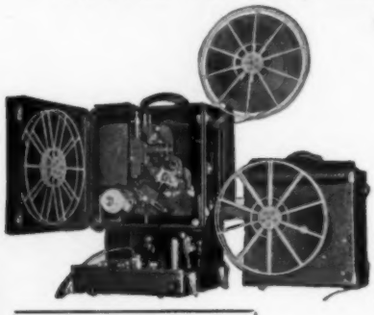

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16 mm Sound

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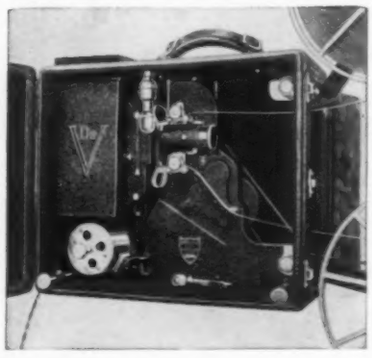

DeVry 16 mm. Silent Projector Can be changed quickly for sound.

Many schools make this equipment pay for itself and raise other school funds. Write for convincing letters from schools that have done this. Smaller schools can also secure DeVry Equipment in this manner. Write for details.

See November Educational Screen for description of New DeVry Spring Steel Reel — 1200 and 1600 ft. capacity.

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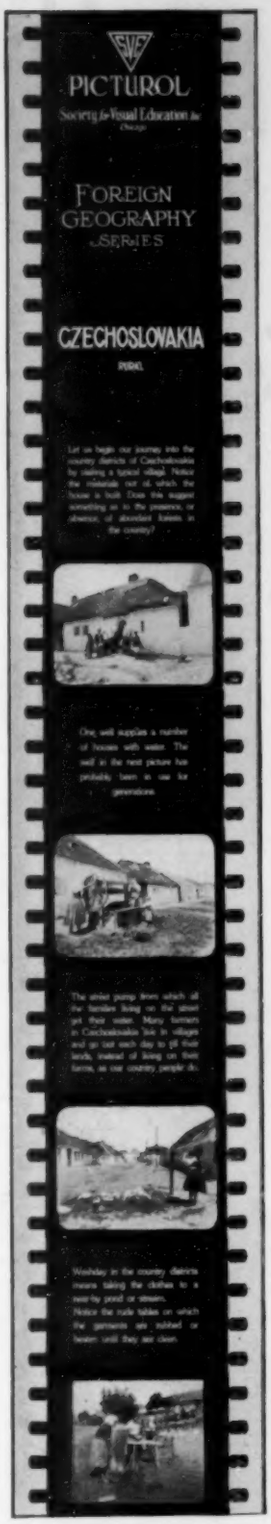

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Thousands of schools have adopted Picturols in the past but greater numbers are now discontinuing the use of the old fashioned glass slide in favor of the modern film slide method. More up-to-date material is available in this form and at a cost of one twentieth as much. Libraries are extensive and new material is always available. Hundreds of films available in the following courses:

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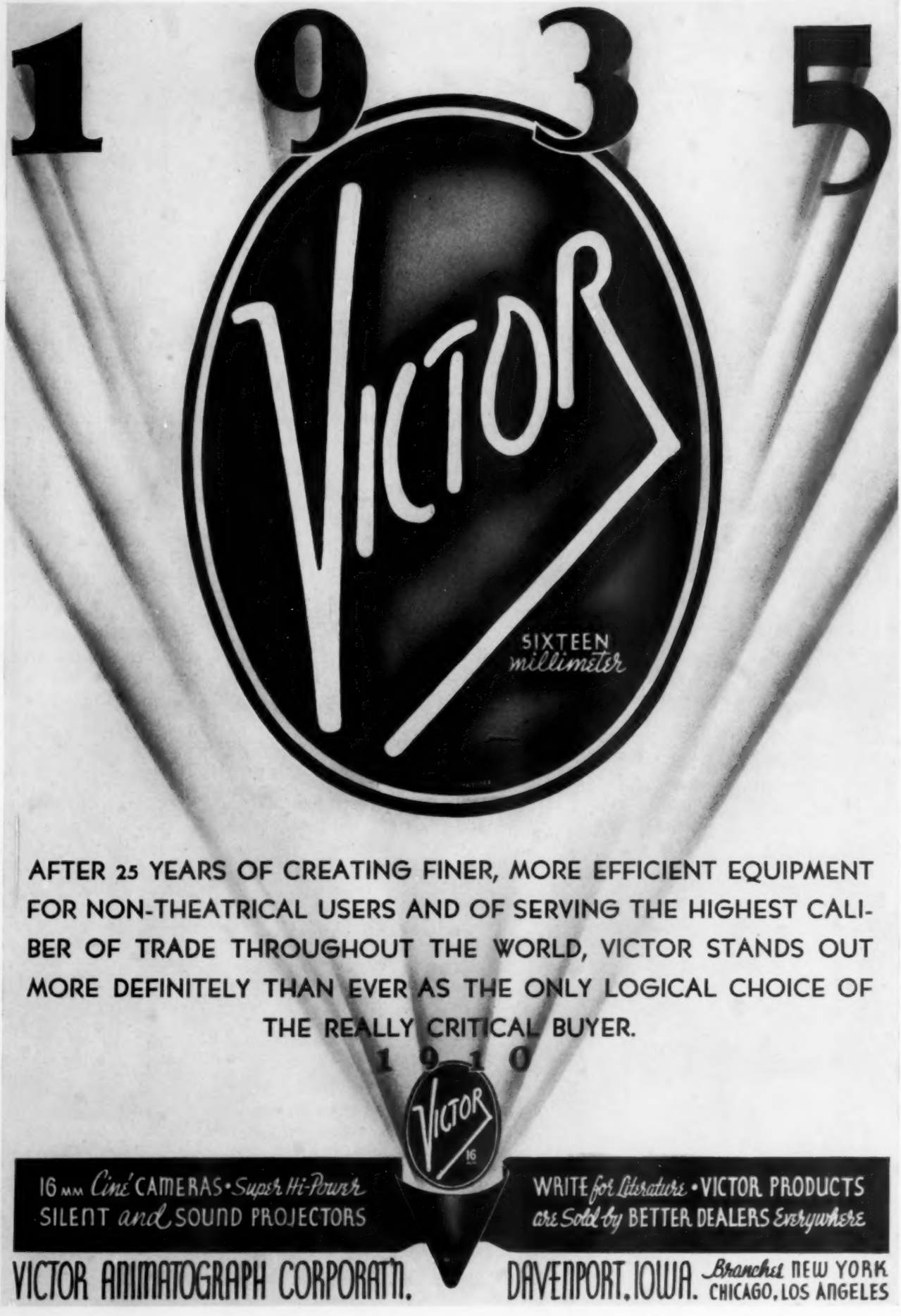
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Editorial

TWENTY years ago this year was born, and even incorporated, the first "national organization" for promotion of the visual field. It was still-born. A few years later came "The National Academy of Visual Instruction" which carried on uninterruptedly, surviving a period of competition with a shortlived rival, finally merging with the department of the national association under the imposing if lumbering name of "The Visual Instruction Department of the National Education Association". The latter now stands as the official and only national organization for the development of the visual idea.

Exactly what has been the "achievement" of the twenty years? We do not know, nor do we know how it could be determined with any accuracy. We have a dark suspicion that it may be too slight to be worth determining. We voice this suspicion with infinite regret, for THE EDUCATIONAL SCREEN believes utterly in the need and value of a central organization. It has proved this faith since 1922 by official-organing steadily and hopefully, year after year, fulfilling some thousands of membership subscriptions at a rashly low figure.

The average annual achievement seems about as follows: A meeting or two a year of addresses and discussions before an audience of a few hundred, largely the same auditors at each session; for substantial broadcasting of the message to the field "printed proceedings" are regularly announced but not supplied; a year's membership of a few hundred is attained, when it should be thousands. Stimulating as these activities are for those in contact with them, their influence on the national field of several hundred thousand teachers can hardly be considered appreciable. There are indeed local groups whose service to their territory is vastly more significant than that of the national organization to the national field.

What explains, then, the unmistakable steady growth of the field? Two things. First, the thousands of live teachers using visual aids independently, enthusiastically, with ever growing effectiveness, in city school systems or isolated country classrooms. They have not waited for the dictates of a central organization nor for the dicta of research. Second, the commercial firms ably serving this growing field, making possible for countless individuals a start in visual teaching by helpful and trustworthy information and by furnishing visual material and equipment on terms the infant prospect can afford.

There are gratifying signs of new and larger ideas among leaders in the Department for this February meeting. These ideas are pointing in the right direction. Obviously, present membership fees can do nothing toward expansion. Only expansion can offer any inducements toward larger membership. Real funds are needed. They must be found, and not in teachers' pockets. Funds are found for other causes infinitely less vital than the modernizing of our national education. Funds can be found for this—funds for making a mighty parent organization to stand by every school, large or small; to inform, instruct, advise the willing thousands waiting for such aid; to collect, select, edit, produce, distribute visual materials in limitless variety as will be needed; in short, to bring to realization the greatest opportunity ever to come within education's reach since the advent of printing. And who could present the case so convincingly as the right committee chosen from the national organization? Such a committee, chosen now, to report in February, 1935, would have the heaviest task ever assigned in this field, but also the most tremendous opportunity for bringing immeasurable values to future generations. Why not try it?

AN old friend returns this summer—that unique institution, the De Vry Summer School. Back in days when visual education was far more an infant than now, the first "School" was organized by A. P. Hollis. It was a success from the start and for four years was a Mecca for visual education pilgrims. All phases of the new methods were discussed and studied. Many a noted name appeared on the programs.

From the first Mr. De Vry contributed all the funds. Tuition was free. When the QRS-De Vry merger dissolved in the great depression, he was forced to suspend the sessions temporarily. Now he is again in position to supply the funds, and the fifth session will be held this year from June 24 to 28 at the Francis W. Parker School. In keeping with the growth of the field, emphasis will shift this year from theory to practice, from precept to example. Many more films will be shown. Most of the outstanding educational and industrial films of the last few years can be seen and heard. Advertising men are invited to supply the technical slant. The operation of sound on film systems will be taught daily. Recreational features will include tours to great visual exhibits like the Planetarium, Art Institute and Field Museum, and Mr. De Vry's yacht will be on duty as usual for trips on Lake Michigan.

If it is a "commercial enterprise", we incline to say "may there be more like it". Perhaps the Eastman School of Music, the Ford Free Library of Educational Films were selfish projects—but it is selfishness in enlightened form, bestowing many a blessing that would have been otherwise unattainable. At his "Schools" Mr. De Vry has never offered for sale a piece of apparatus. He is content to reap the good will of teachers attending, for which primarily he sowed.

NELSON L. GREENE.

Efficiency In Visual Instruction

By J. M. LEVELLE
John Marshall High School, Cleveland, Ohio

THERE is a tremendous amount of satisfaction to be gained from the knowledge that a thing has been well done. How much that feeling really means has been experienced by anyone who has tried earnestly and conscientiously to do his work and has had this application show tangible results. In the John Marshall High School, we have a visual education set-up which has functioned smoothly for five semesters and which we believe to be efficient. This article is meant to be an accurate description of this set-up, together with some observations on its operation.

The teachers in Cleveland are fortunate in having a central source of visual materials in the form of an Educational Museum, which is an integral part of, and is maintained by, the Cleveland School System. Throughout the school year, the museum maintains a weekly delivery service to all schools, at which time materials which have been ordered by teachers are received. Such materials as charts and maps; mounted pictures; models; lantern slides; motion pictures (both 35 mm. and 16 mm.); lantern slide projectors; motion picture projectors; strip films and strip film projectors, etc., may be had by any teacher in any building in the city. The services of the Educational Museum are invaluable in enabling instructors efficiently to organize and present in their respective buildings, a well-defined, systematic program of visual education throughout each semester.

The materials which are available from this museum are catalogued, and these catalogues are placed in the hands of some particular teacher in each of these schools. That teacher acts as director of the visual education activities in that building. The writer considers very fortunate the fact that he holds this post of director in this particular school, for it is certainly an interesting work, to put it mildly. The mechanical side of visual education in classes is done by a group of boys composing what is known as the Photography and Projection Club, these boys having as their work the taking of almost all school pictures such as athletic teams, clubs, classes, etc., the operation of the sound motion picture equipment with which movies are shown during three different lunch periods each day, and the operation of the projection machines for Visual Education classes.

During the first two weeks of each semester, each teacher of a subject in which visual education materials may be used, is interviewed with regard to his or her needs for the coming term. The teacher, using the outline or course of study followed in presenting the subject matter to classes, chooses the particular visual aids which will fit in with the various topics. The week of the semester when the different materials will be needed is noted, together with teacher's name and class. This information is taken on a type form made up for the purpose (Form I).

Teachers' Semester Schedule of Visual Aids

Teacher: *Potts*
Class: *Chemistry*

Week of Semester	Lantern Slides	Movies	Strip Film	Mounted Exhibit Pictures
1st		*Beyond the Microscope*		
2nd		*Purifying Water* *Water Cycle*		
3rd		*Liquid Air*		
4th		*Bituminous Coal*	*Coke Ovens*	
5th		*Sulphur*		
6th				
7th		*Iron Ore* *Pig Iron to Steel.*		
8th				
9th		*Glass Making*	*Brick Making*	
10th		*Story of Storage Battery*		
11th				
12th				

Form I

Next, the orders of the teachers are correlated into one master order sheet, of which several carbon copies are made for future references. Two copies of this master order are then sent to the Educational Museum for recording. They are

checked over there, and one copy is returned to John Marshall. On the copy returned are indicated any changes which may have been necessitated by a conflict in dates with some other school. If two schools order the same set of lantern slides on the same day, and copies of this set of slides are not available, then the order received first at the museum is the one which is honored. This difficulty arises very seldom, as duplicate sets of slides, etc., are usually on hand. A copy of one sheet in a master order is shown here (Form II).

Form II **Master Order Sheet**

John Marshall Visual Education Order (1933)

Deliver on	Teacher	Name Visual Aid	Type	Arrived
Oct. 20	*Molony*	*Brick making*	*slides*	
		Cleve. Clothing	*slides*	
		Coke Oven Process	*slides*	
	Ryan	*Eve. of Revolution*	*slides*	
	Potts	*Compressed air*	*16mm.*	
	Persky	*Treasure Island*	*slides*	
		Shakespeare	*slides*	
	Lynix	*Eve. of Revolution*	*16mm.*	
	Kirsch	*Germany, Rural Life*		
		Germany, Cities	*slides*	
	Bosworth	*Linen Industry*	*slides*	
	Ryan	*Air Transportation*	*slides*	
Oct. 27	*Kirsch*	*The Rhine region*	*slides*	
	Dawson	*Insect Mimicry*	*16mm.*	
	Nairy-Persky	*Lady of the Lake*		
		Scotland	*slides*	
	Mathews	*German Music*	*slides*	
	Lynix	*Colonial Life*		
		Colonial dress	*slides*	
	Jones	*Ivanhoe*	*slides*	
	Nairy	*Quest of Sir. Gal.*	*slides*	
	Eddingfield	*Greece, Ancient Gr.*	*slides*	
	Bosworth	*Silk*	*16mm.*	
	Harper	*Woolen Goods*	*16mm.*	
	Levelle	*Bituminous Coal*	*16mm.*	
	Dawson	*The Frog*	*16mm.*	
	Dawson	*The Honey Bee*	*16mm.*	
	Bosworth	*The Silkworm*	*16mm.*	
	Levelle	*Primitive Animals*	*16mm.*	
Nov. 3	*Nairy*	*Scotland*		
		Castle Life	*slides*	
	Molony	*Jamestown*	*16mm.*	
		Cleve. Harbor	*slides*	
		Cleve. Water supply	*slides*	
	Dawson	*Life of Burbank*	*16mm.*	
		Breathing	*16mm.*	
	Dawson	*Digestion*	*16mm.*	
Nov. 10	*Molony*	*Pilgrims*	*16mm.*	
	Dawson	*Mosquito*	*16mm.*	
	Levelle	*Dixie*	*16mm.*	
		Pueblo Indians	*16mm.*	
	Boyd	*Cities of France*		
		Industries of France		
		Paris, France	*slides*	

Continuing, in sequence, the steps involved in presenting a visual aid to a particular class, we have next the "notice of arrival of materials." This third form is sent to each teacher having materials ordered for that particular week (Form III). The visual education materials received from the Educational Museum on Friday of each week may be kept

Form III **Notice of Arrival**

Visual Education Materials

The following materials have arrived from the Educational Museum for your use any time during the week of *November 6.*

Please indicate below, the days and periods you wish to use them, and return this sheet to me as soon as possible. It will then be returned to you stating which rooms your classes report to each period. Please have class report to regular classroom first so that visual room may be made ready for it. Report to visual room about five minutes after beginning of period.

Lantern Slides	Motion Pictures	Other Materials
Cleveland Harbor	*Jamestown*	
Cleveland Water Supply		

Days you wish to show these:

Day *Tues.* Visual Aid *Cleve. Harbor* Pd. *3-4*
Cleve. Water
Day *Wed.* Visual Aid *Cleve. Harbor* Pd. *7-8*
Cleve. Water
Day *Thurs.* Visual Aid *Jamestown* Pd. *1 and 6*
Day..... Visual Aid..... Pd.....
Day..... Visual Aid..... Pd.....
Day..... Visual Aid..... Pd.....

(Do not fill in below)

Please have class report to Room *304* Pd. *3* Day *Tues.*
Room *301* Pd. *4* Day *Tues.*
Room *304* Pd. *7* Day *Wed.*
Room *303* Pd. *8* Day *Wed.*
Room *301* Pd. *1 and 6* Day *Thurs.*

Your visual materials, projection machine and an operator will be in the room assigned at that period. If you wish a pre-view of your materials the 9th period Monday, Wednesday or Friday, or the 10th period any day, indicate here:

Day.....Pd.....

until the following Friday. Therefore, Miss Molony, for example, received the form here illustrated, informing her that two sets of lantern slides and a 16 mm. motion picture have arrived for showing to her classes. She indicates on the space provided, the periods and days she wishes the materials shown, and returns the form to the director.

For purposes of illustration, we assume the teacher wishes to show the two sets of lantern slides to two different classes on two different days, and the motion picture to two other classes on a third day. The rooms used for visual education showings are science rooms which are provided with opaque shades. The periods during which these various rooms are empty are charted, and the teacher's "day and period demand" is then correlated with the particular rooms which are available. This information is given her on the bottom of the form, as shown, and the form is returned to her. In the meantime, we have made notations in the ledger from which the boys work, that these materials are

to be shown at the time and place specified. Opposite the notation that Miss Molony is to be shown "Jamestown," 1st period Thursday, is written the name of the boy who is working as a projectionist that period, and so also, for the other materials.

The problem of charting the week's visual education activities then becomes rather simple. When all forms have been returned for the last time to teachers concerned, we have a record in our ledger of just what will be taking place each period of each day that week. The boys are always informed as to when they are to work, for the record is there for them to see. They have the habit of stopping at the darkroom (part of which is used as the school visual education headquarters) several times daily, as they pass to and from classes, to look at "the book". Thus when Miss Molony reports to room 301 on Thursday the first period, she finds the room has been darkened and the lights turned on; the operator is there and has his projection machine set up and loaded; the class is instructed briefly but clearly as to the purpose and aim of this presentation; the lights are turned off and the "show is on." In other words, all that is demanded of the teacher after she has placed her order is that she appear with her class in the proper room at the proper time.

Everything, of course, depends upon the boys. That is, if this system works "according to Hoyle" the boy acting as projectionist must above all things, be dependable. This is so thoroughly impressed upon a boy when he is being trained to do this work, that in the course of seven semesters there have not been a half dozen instances in which classes were held up due to the forgetfulness of the operator. Each boy comes to the darkroom at the beginning of the period he is to work, gets his visual materials and projection machine, and after his class is over, returns these materials to their proper places after having prepared his projection for its next regular class. The report compiled at the end of a typical semester shows the following: Number of different teachers using visual aids — 31. Number of visual education classes held — 272. Pupil attendance—10,880.

In spite of many things to be said in its favor, visual education is a miserable failure in the hands of some teachers. It is necessary to create in the minds of the pupils, the proper attitude toward the visual materials to be shown. It must be remembered that a pupil's normal contact, with motion pictures particularly, is for entertainment purposes only, and he is apt to consider an excellent educational film as merely another show. A teacher who uses visual aids actually works against a handicap of this sort, and must handle his classes accordingly.

Teachers should keep in mind the fact that while a picture may be "worth a thousand words," pictures alone will not suffice. A class of pupils should not be expected to sit quietly and attentively through the showing of a series of lantern slides while the teacher offers little or no comment regarding the value of any particular slide, or its connection with the subject matter being studied at the time. Not quite so much comment by the teacher is necessary when the visual materials being shown are motion pictures. The action, in this case, maintains interest and attention. It is believed that a teacher may do a great deal toward proper reception of a visual aid by pupils, if just before the visual showing is made, two or three minutes are used by the teacher in impressing pupils with the value of the slides; which ones to note in particular; just how they connect with what is being studied at the time, etc. Another thing believed to be of great value to a teacher in presenting visual aids, and which is too often neglected by the teacher, is a careful preview of her visual aid materials before they are presented to classes. It is disconcerting to all concerned, to have a teacher arrive at one of a series of slides, and after studying it for a moment, have to tell the class that she isn't sure just what that slide refers to. If the teacher hasn't attached any more importance to it than that, why expect pupils to give careful attention? This is just another way of saying that the presentation of a visual aid does not save a conscientious teacher very much work, if any.

We have teachers who spend considerable time in composing a list of questions to be given a class previous to the showing of a set of slides; assigning to pupils, topics relating to subject matter in slides, so that these topics may be given to the class before or after the slides have been seen. While all visual aids do not require elaborate preparation of this type, a certain amount of it certainly will bring out much more information, and especially, impress upon the pupils the fact that slides constitute not entertainment, but an integral part of the work to be covered in mastering a particular bit of information.

In our opinion, a class will derive maximum benefit from the showing of a visual aid when that showing is made during the time that the information it contains is being studied in the classroom. This necessitates considerable advance planning by the class teacher, and also by the person in charge of visual activities in a particular building. The various pictures, slides, etc., must arrive on schedule; each teacher must be notified of their arrival; arrangements must be made for the use of a projection room during periods which will not conflict with the classes regularly scheduled for that room; and an operator for the projection machine must be provided for each of these periods. In small school systems, where visual education is

(*Concluded on page* 46)

Motivation of English Through Films, Slides and Pictures

By ELSIE I. OTTO
Grade 4, School 9, Buffalo, New York

IT IS SURPRISING how much can be said on the subject of visual aids with regard to oral and written English. In the following article, I shall briefly outline the applications to English Work of the moving picture machine, the slides and other visual aids.

Usually when films, slides and pictures are mentioned, the majority of teachers think of them in connection with geography or history, which is too narrow a conception of their uses. Among all the visual aids which we now possess, the primary advantage of the motion picture is that the element of motion or apparent life is added to the strictly pictorial element. Barring an actual visit to the places mentioned in a story or a poem, the child has all the facilities at hand for an understanding of them.

It is relatively easy to train children to repeat by rote what they have been told but their understanding will be absolutely limited by the extent to which concrete experience at one time or another has given meaning to the words used. No matter how practiced we may be in the use of words, it is difficult to make them provide a satisfying picture. Classroom films are an effective medium for the presentation of concrete situations. In the use of the film the children are being trained to use the powers of concentration, observation, and mental alertness. Not only do they obtain knowledge of the subject studied but they are trained to organize the facts learned. The picture actually takes the child to the realm of fairies, dwarfs and giants. It is also possible to obtain films on the lives of Washington, Lincoln, Longfellow, Edison, and other men of note which can be used in connection with English work. The moving picture may be used as an introduction to a lesson, a review, or a summary. To emphasize or stress a certain fact, the use of a slide is more effective than the film, as a film should not be stopped during its run.

Pictures have various functional uses in instruction which vary according to the teaching situation. In the subject of English, they may be used to stimulate interest and bring definite facts before the pupils. A child requires concrete information to meet this daily need. Nearly all school children are obliged to get their ideas from pictures since few may actually visit and see places first hand. In the use of pictures the following should be kept in mind:

1. Simple pictures are better than complicated ones for teaching.
2. Pictures that show action are best suited for English work.
3. Color is to be preferred, especially for lower grades.

In introducing technical English in its simplest form, such as the statement, question, command and exclamation, quotations and possessives, the use of large, attractive, well-mounted pictures make the otherwise unattractive work a real pleasure to the child. He will also be able to give a better variety of sentences with the ideas received from the pictures.

During the past school year I completed a project in connection with the subject of English in which I used the film to great advantage. I developed the study of the lamp from the prehistoric times to the incandescent lamp of the present day. In the study of the cave dwellers the children became very much interested in the methods which these primitive people used of lighting the cave. After completing the story of the cave dweller, the class proceeded to work out a plan to study the various steps in the development of artificial illumination from the days when the cave man kindled his fires with the aid of flint sparks to the present day method of diffusing light for home, street and factory. (Detailed outline of the project is given at the end of the article).

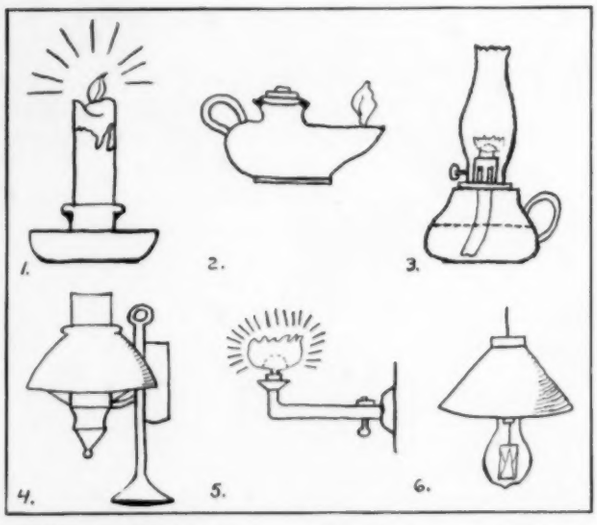
Children are always delighted when they hear that the work will be supplemented with a moving picture film. So if one can arouse a greater interest by the use of a film in introducing a lesson, it is well worth the effort. The film was within the scope of the average fourth grade child. A word study preceding the use of the film simplified any difficulties which might arise in the reading of the explanatory notes on the screen.

A discussion followed. The children were encouraged to talk freely about the different ways of artificial lighting and their talk supported the order of development. Then an intensive study of each lamp was made. To supplement the film the children read from the various reference books at the reading table for the purpose of gaining additional information.

A collection of pictures was brought in and mounted.

The mounted photographs of the various lamps were used in the oral English period. They were placed in the chalk tray and the individual child was permitted to select any picture and give a brief oral summary of the facts learned about it.

The outline was developed by the class, the teacher acting as a guide. Oral and written stories followed, accompanied by the making of slides during the bell work period from drawings made during the regular drawing period. The drawings and stories were arranged in booklet form. Fifteen pupil's drawings were chosen to be made into slides. Even though some of the children's drawings were crude, enough were good to warrant doing the work and the greatest advantage was the interest it created. Children love to do things rather than just look at something someone else has done.



Slide drawings made by pupils showing: 1. Candle, 2. Roman Lamp, 3. Kerosene Lamp, 4. Argand Lamp, 5. Gas jet, 6. Incandescent Lamp.

It was amazing, the ease with which the children worked in making the drawings for the slides and the larger colored illustrations. When I completed the project, I felt a real satisfaction and I realized more than ever that we never know how much children can do until we give them an opportunity.

Outline of Project, "The Development of the Lamp"

Introduction: Next to usefulness for heating and cooking the greatest use of fire is to furnish light to drive away darkness. Man is not content, like birds and animals, to go to sleep at the setting of the sun. He takes a part of the night and uses it for work or for travel or for social pleasures or for improvement of his mind and in this way adds several years to his life. He could not do this if he were compelled to grope in darkness.

When the great source of daylight disappears, he must make light for himself, for the sources of night-light—the moon, the stars, the aurora borealis and lighting are not sufficient to satisfy his wants. We shall follow man in his efforts to conquer darkness and we shall have the story of the lamp.

Today we shall see a film on the development of the lamp from the days when the cave man kindled his fires with the aid of flint sparks to the present day methods of lighting our homes, streets and factories. Let us find out about the different lamps used. Try to note the order in which these were developed.

Procedure—1. Film shown, "The Light of a Race."

2. Note made of different lamps and their order of development.

3. Class discussion—Children were encouraged to talk freely about the different ways of artificial lighting and their order of development.

Subject Matter and Motivation: A—Intensive study of each lamp used. (To supplement the film, the children read from various books at the reading table for the purpose of gaining additional information.)

B—Oral and written stories accompanied by the making of slides during the bell work period and drawings made during the regular drawing period.

With teacher acting merely as guide, the children developed the following outline:

The Story of the Lamp

1. *The Torch*—
   a. Light furnished by fire.
   b. The first lamp (the torch).
   c. The first improvement (bundle of sticks dipped in grease).
   d. The next or further improvement.
   e. Who used the torch or pine knot?
   f. How long was the torch in use?
2. *A Shell Used as a Lamp*—
   a. When the shell was used.
   b. What men had to know.
   c. Material used.
   d. How it was used.
   e. Who used this kind of lamp?
   f. The Eskimo lamp.
3. *The Lamp of the Middle Ages*—
   1. a. When did man use the earthen or metal bowl?
      b. What was used as a wick?
      c. Where was the wick placed?
      d. Kind of oil burned.
      e. Kind of light it gave.
   2. a. Who used this lamp?
      b. What metals were used?
4. *The Candle*—
   a. The crudest form of candle.
   b. The candle during the time of Alfred the Great.
   c. The candle of Colonial Days.
   d. The candle of today.
5. *The Argand Lamp*—
   a. When and by whom was the next improved lamp invented?
   b. How did this lamp differ from the others?
   c. What kinds of oil were used to burn?
   d. What improvements followed?
6. *The Gas Jet*—(Sentence work)
   a. Who invented the gas jet?
   b. When?
   c. How did they get the gas?
   d. How was the gas sent to different parts of the house?
   e. What kind of light did gas give?
   f. How did this differ from other lamps?
   g. To what places was it extended?
   h. What city in the United States was the first to be lighted in this way?
7. *The Arc Lamp*—
   Copy the following story on your paper and complete the work below.

"About 1876 a new kind of light began to appear. This was the powerful arc light. It was the first electric light to be invented. It gave as much light as a hundred gas jets or several hundred lamps. Such a light is now used for lighting the streets of a city. It is rarely used indoors because the light is too strong."

1. A new kind of light began to appear in.....
2. It was an (oil lamp, gas light, electric light).
3. It gave as much light as..... gas jets.

4. It was mainly used for lighting
5. Why could it not be used in homes?

8. *Edison's Incandescent Lamp*—
   1. Who invented the incandescent electric lamp?
   2. The Lamp—
      a. Material used.
      b. How used.
      c. Tell about the light produced.
      d. Where used?
      e. Advantages of this lamp.

9. *The Story of Thomas Alva Edison*—
   1. Born where?
   2. Boyhood: a. Education. b. How he spent his time.
   3. What he studied later.
   4. What Edison gave to the world.

Reference Books for Children:—1, American Inventions and Inventors (Mowry); 2, Adventuring in Young America (McGuire and Phillips); 3, The Science of Things About Us (Rush and Winslow); 4, How We are Sheltered (Chamberlain); 5, How the World is Housed (Frank Carpenter); 6, Days Before Houses (Mohr and Beatty); 7, Rago and Goni (Wiley); 8, Lodrix (Wiley and Edick); 9, The Cave Twins (Lucy Fitch Perkins); 10, Children of the Lighthouse (Nora Smith); 11, Around the World with the Children (Carpenter); 12, World Book Encyclopedia.

Reference Books for the Teacher:—1, Stories of Useful Inventions (S. E. Forman); 2, For the Children's Hour III (Bailey); 3, World Book Encyclopedia; 4, Compton's Pictured Encyclopedia.

Visual Education In Elgin Public Schools

By E. C. WAGGONER
Head of Department of Physical Sciences, High School, Elgin, Illinois

IN A PREVIOUS issue of the EDUCATIONAL SCREEN a letter of mine which was quoted very briefly mentioned the plan we are using in the Elgin schools to finance our visual program. Since that time I have had so many inquiries concerning the plan in detail, and our experience with various motion pictures as educational aids, that I have prepared this short article for those who may be interested.

First I should like to say that those teachers who have rightly used the educational motion picture as a teaching aid, and who have had some well planned method of evaluating it, need not be told that the educational motion picture has a teaching value which justifies its use in any school system.

Five years ago I set out to determine to my own satisfaction whether or not the results obtained from the use of films really warranted the purchase of films and projection apparatus. The school authorities and the two hundred teachers in the system cooperated with me in every way possible. While this little survey which we have been conducting for five years would not meet the requirements of a well planned research problem, it has answered the questions we wanted answered.

We are fortunate in having a Board of Education, a Superintendent and a Principal who are progressive and awake to the best interests of education. They would gladly purchase adequate visual equipment for the entire system out of school funds if such funds were available, but anyone who has been connected during the past five years with schools which have been supported by taxation, knows how difficult it is to introduce a new item of any size into the already over-burdened budget. However, we have had some material aid from that source.

In a few of our departments, especially in the physical science department, the teachers have worked out a program which includes in the regular curriculum some thirty-seven educational films. Each film had been studied by the teachers with a great deal of care before it was given a place in the curriculum. In order to show the type of film included in the thirty-seven used in the physical science department, I will give the producers and titles of a few in this list:

University of Chicago—Molecular Theory of Matter, Oxidation and Reduction, Electrostatics, Energy and Its Transformation, Sound Waves and Their Sources.

Erpi Picture Consultants—Plant Growth, Seed Dispersal, Tiny Water Animals, Flowers at Work.

Eastman Teaching Films—Circulation, Simple Machines, The Living Cell, Irrigation, Chemical Effects of Electricity.

Harvard Series—The Wearing Away of the Land, The Work of Running Water.

Nine of the above sixteen are sound pictures and seven are silent. We have had silent projectors in the school system for several years. We have had a sound-on-disc projector for two years. No one could be happier than I am to see those sound-on-disc projectors disappear. Only those with experience can appreciate that mental collapse when a program coming from one of those discs begins to repeat itself over and over and over. The last experience I had with a sound-on-disc projector was in a program which I was giving before a group of science teachers. I had spent fifteen minutes explaining to this group how I used the film *Molecular Theory of Matter* in my physics and chemistry classes. I then turned on the picture and the sound that greeted us was a lecture on *Animals of the Zoo*. It did not take any imagination to guess which animal this group of teachers had in mind. The sound-on-film projection eliminates these tragedies. Since all the sound films are now being made as sound-on-film numbers, we therefore needed money not only for the rental and purchase of films but to purchase the sound projector as well.

In our senior high school we have what we call a home

room period. This period is thirty minutes in length and is the time when we have our assembly programs, our club activities, special programs, etc. These activities can usually be taken care of very nicely in the first four days of the week. On the Fridays which are free we have a movie program of two reels for which we charge a five cent admission. We simply make the announcement of what the picture is to be on the preceding day and give an opportunity for students to purchase tickets for the program. We have an enrollment of 1335 in this building, and we have had an average attendance of 574 admissions on the twelve programs given last year and this year so far. This fund is very nicely taking care of our visual program. The programs have not lost their attractiveness to the students. Attendance is on the increase.

The available entertainment films in 16 mm. sound were limited in number when we first started this plan; but at present several companies have made some fine contributions to this field, and the supply is increasing. By the funds obtained from these programs we have been able to make our payments on our sound projector, to purchase five films, and to rent the other numbers we wanted on our educational program. We have also introduced the *Yale Chronicles of America* in the American history classes in the schools.

Of course, we can not show films just hit and miss. We have made it a practice to preview all the numbers in the programs. We wondered what kind of a picture and what quality of sound we could expect from a 16 mm. sound-on-film projector operating in an auditorium with a seating capacity of over one thousand. The results have been exceptionally gratifying. It is difficult to appreciate the advancement made in 16 mm. projection equipment in the last three years.

Some school authorities object to giving a program in the school for which a small charge is made. It occurs to me that when funds so raised are to be used to enrich the school curriculum, the practice is just as justifiable as that already recognized in the case of football games, class plays, band concerts, etc.

In conclusion, while I am not attempting in this article to evaluate in detail the use of the educational film, I should like to say that I consider the educational motion picture to be one of the most, if not the very most, powerful teaching aid ever developed. And I do wish to say in passing that the film to be of real value must be made to include important curriculum content, presented with the best teaching procedure—and there is just as much difference in film presentation as there is in teacher presentation. I mean by this that to insure the desired results, the teacher, in advance of the showing of the films, must have prepared the group for the understandings to be acquired from the picture. Finally, with carefully chosen film material, and the correct enthusiastic foresight on the part of the teacher, there can be little doubt of the real value of the educational film.

Film Production Activities

16 mm. Sound Film Rental Service

Ideal Pictures Corporation, Chicago, are rapidly building up a large rental library of 16 mm. sound-on-film motion pictures. They have taken over the distribution of the Bell and Howell releases and other libraries, including such splendid features as *Black Beauty, The Star Witness* (featuring "Chic" Sale), *Mystery of Atlantis, Krakatoa, This Is America, Killers of the Chaparral, The Thirty-Second Eucharistic Congress;* one-reel scenic, natural history and travel pictures; series of *Operalogues;* cartoons and comedies.

Child Development Films Completed

A series of four one-reel pictures on Child Development have been produced by Erpi Picture Consultants in cooperation with Dr. Arnold Gesell of the Yale Psycho-Clinic. The titles are: *The Development of Infant Behavior: Early Stages, The Development of Infant Behavior: Later Stages, Posture and Locomotion,* and *From Creeping to Walking.*

This group of films portray in detail infant development from the ages of eight weeks to one and one-half years. Dr. Gesell delivers the accompanying lecture, explaining the purpose and significance of each step. The series should be of particular interest to child study and parent education groups.

Pre-View of Astronomy Film

Northwestern University presented on Thursday evening, January 24, the premiere showing of the new six-reel astronomical motion picture entitled *Looking Through Great Telescopes,* produced by Araneff Film Associates, Chicago. This motion picture, which was reviewed in the December issue of THE EDUCATIONAL SCREEN, has evoked wide interest. It was made possible through the cooperation of Mount Wilson, Yerkes, Lick, Lowell and Harvard College Observatories. It has absorbing interest because of its spectacular presentation of heavenly bodies in a manner never before shown by motion picture or on any screen.

A Safety-Teaching Production

A novel and humorous safety film, *Once Upon a Time,* has been produced by the Metropolitan Life Insurance Company as part of its general health and safety educational program. The picture is unusual in that it is the first animated sound cartoon comedy in technicolor ever used to promote safety on the streets and highways of the nation. The characters are taken from Mother Goose, Alice in Wonderland and mythology. The humor and musical score, which was written expressly for the film, make it an entertaining as well as instructive subject, which never

loses sight, however, of the main purpose—that of showing the dangers of careless driving.

College Produces Scientific Series

The first of a series of animated scientific and engineering motion pictures designed to facilitate methods of teaching has been completed by the new division of visual education at the Massachusetts Institute of Technology. It presents for the first time in visual animated form the behavior of an electrical wave as it travels along a 250-mile transmission line. The new film, *Traveling Waves on Transmission Line,* is a combination of animation and outdoor scenes showing various types of high voltage power lines. What happens when a switch is closed and electricity flows along such lines is graphically presented in the form of a dark wave flowing along a power line. The picture reveals that for a few millionths of a second after a switch is closed the electrical wave flows back and forth on the line and is often accompanied by extra high voltages.

The study was made on a laboratory model of a 250-mile power line in which actual operating conditions could be reproduced. In making this study, which was carried out by Professor Louis F. Woodruff, it was necessary to determine the form of the wave every seven miles along the transmission line. The records were made by a device called a multi-element cathode-ray oscillograph. Many hundreds of these reconstructed forms were carefully prepared as paper cutouts and photographed to make possible the throwing on the screen of the actual progress of voltage down a line. The speed of the actual wave is the same as that of light, 186,300 miles per second, but on a 20-foot screen it is slowed down to about one-six-hundred-millionth of this speed, so that several seconds are required for a single passage of the wave. In future films it is planned to present other electrical wave forms, including those produced by lightning discharges striking on or near power lines.

Other films in the proposed series include the presentation of descriptive geometry in animated form, the operation of complex machinery, principles of physics, problems of human relations, and many others. The films, while designed primarily for instruction of students of the Institute, are expected to be available to other educational institutions.

Boulder Dam Motion Pictures

A Construction View in November, 1934, of the Dam and Intake Towers

The official films of Boulder Dam were made to insure a permanent and authentic record of this gigantic project. Carefully prepared and edited, they show first the untamed Colorado before construction operations were started, then the successive steps in building, early surveys, laying out of roads to the site, construction of diversion tunnels, blasting and stripping the canyon, pouring operations and other instructive sidelights.

Particular thought has been given to the use of these films in schools. They make clear to pupils just how enormous was the task involved. Seeing this dramatic engineering triumph cannot fail to fire the enthusiasm and arouse the patriotism of American youth. For use in Elementary Schools, High Schools and Junior Colleges No. 2 Film is recommended, available in 16 mm. size, 500 ft. length, and in 35 mm. size, 1250 ft. length.

Engineers and engineering students may secure a clear understanding of the planning and execution of the work by the use of Film No. 1, available in both 16 mm. and 35 mm. size, 6 reels in length, which shows the job laid out and carried forward in detail.

Films are available from Boulder Dam Service Bureau, Boulder Dam, Nevada, on a sale basis.

Department of Visual Instruction Notes

Conducted by ELLSWORTH C. DENT, Secretary

Meeting of the Department of Visual Instruction National Education Association

Chelsea Hotel, Atlantic City, New Jersey
February 25-26-27, 1935

The meetings of the Department of Visual Instruction have been arranged in cooperation with the Department of Superintendence. There will be two distinct meetings of the Department of Visual Instruction and a joint meeting with a discussion group of the Department of Superintendence.

General Theme: *Vitalizing Instruction Through the Use of Visual-Sensory Aids.*

First Session—Monday Afternoon, February 25

Wilber Emmert, President of the Department, presiding.

2:00-2:30 PANEL DISCUSSION (Thirty minutes of informal discussion)—The Place and Values of Visual-Sensory Aids as Determined by Experience and Research. V. C. Arnspiger, New York City, Panel Chairman.

Members of the Panel—S. R. Powers, Columbia University; Hoyt Smith, Mamaroneck; Winifred Crawford, Montclair; Fannie Dunn, Columbia University; Dr. Rulon, Harvard University; N. L. Engelhardt, Columbia University; F. Dean McClusky, Scarborough; C. F. Hoban, Harrisburg; V. C. Arnspiger, New York; Wilber Emmert, Indiana, Pa.

2:30-3:10 The Use of Pictures in the Development of a Unit—Miss Zoe A. Thralls, Assistant Professor of Geography, University of Pittsburgh, Pittsburgh, Pennsylvania.

3:10-3:35 Administrative Problems Involved in the Effective Use of Visual Aids in the Classroom—P. D. Pointer, Principal of the Central Junior High School, South Bend, Indiana.

3:35-4:00 Taking Advantage of Radio Possibilities—Tracy F. Tyler, Secretary and Research Director, National Committee on Education by Radio, Washington, D. C.

Second Session—Tuesday Morning, February 26

9:30-11:00 Business Session. (Discussion of Department Plans and Policies; appointment of committees, etc.) Wilber Emmert, State Teachers College, Indiana, Pennsylvania, President of the Department of Visual Instruction, presiding.

Third Session—Tuesday Noon, February 26

12:00-1:45 Luncheon Meeting—George W. Wright, New Providence, New Jersey, presiding.

1:15-1:45 Reviving the Past to Interpret the Present and to Inspire the Future—A. G. Balcom, Assistant Superintendent of Schools, Newark, New Jersey.

Fourth Session—Tuesday Afternoon, February 26

2:00-4:00 Joint session with Study-Discussion Group G, Division V, Department of Superintendence will be held in Room A, Atlantic City Auditorium. V. C. Arnspiger, New York City, Group Chairman and presiding officer.

General theme: *The Adaptation of the Newer Media of Communication to Education.*

Overcoming the Restrictions of Learning in the Social Sciences by Means of the Newer Communication Devices, Such as Sound Motion Pictures, The Radio, and Mechanically Recorded Sound—V. C. Arnspiger, New York City.

The Effect of the Newer Media of Communication Upon the Development of the Social Studies—Harold Rugg, Teachers College, Columbia University, New York City.

Acquiring Social Concepts Through Extra-School Agencies in the Form of Theatrical Films and Commercial Broadcasts — W. W. Charters, Ohio State University, Columbus, Ohio.

The Selection of Methods of Subject-Matter Presentations — Harold McClusky, University of Michigan, Ann Arbor, Michigan.

Utilizing the Radio in Educational Programs Involving Large Group Instruction — Levering Tyson, Chairman, National Advisory Council on Radio in Education, New York City.

Administrative Problems Involved in the Effective Use of New Media of Communication in Education—C. F. Hoban, State Director of Visual Education, Harrisburg, Pennsylvania.

Fifth Session—Wednesday Noon, February 27

10:00-1:45 Luncheon Meeting—A. G. Balcom, Assistant Superintendent of Schools, Newark, New Jersey, in charge.

(Testimonial meeting for Alfred W. Abrams, retired Director of Visual Education, State Department of Education, Albany, New York, and others.)

An Invitation to the Convention of the Department of Superintendence of the N. E. A.

February 23-28

You'll enjoy the homey atmosphere at Hotel Chelsea. Situated on the boardwalk, above the ocean, you'll find the sun deck particularly restful.

The Convention facilities are particularly good because Westminster Hall (part of the Chelsea) was especially built for groups. It seats 1800 people and several convention functions are being held there. Hotel Chelsea is located just 5 blocks from the auditorium.

We invite you and your friends to enjoy our excellent food—to be with us at Convention time in Atlantic City.

Come early for Washington's birthday. We urge your early reservations.

Hotel Chelsea

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OPEN ALL WINTER
ON THE BOARDWALK

JOEL HILLMAN

J. C. MYERS JULIAN A. HILLMAN

Sixth Session—Wednesday Afternoon

2:00-2:25—The Use of Visual and Aural Aids in the Teaching of Literature in the High School—Clarence S. Dyke, Department of English, Atlantic City Public Schools, Atlantic City, New Jersey.

2:25-2:50 The Proposed Film Institute of the American Council on Education—George F. Zook, Director of the American Council on Education, Washington, D. C.

2:50-3:00 The Place and Functions of a Department of the National Education Association—Joy Elmer Morgan, Editor of the Journal of the National Education Association, Washington, D. C.

3:00-4:00 Business Meeting.

1. Report of Secretary-Treasurer.
2. Reports of Committees.
3. Discussion of Department Plans: A.—Membership. B.—Finances. C.—Publicity. D.—Denver Meeting.

Massachusetts Free Film Service

A year ago, Boston University School of Education, in co-operation with other educational agencies, inaugurated a Free Film Service, the purpose of which was to make available a centralized place for the distribution of free films to the schools of the state. The service was financed co-operatively by the Massachusetts Teachers Federation, the Massachusetts Branch of the Department of Visual Instruction of the N. E. A., and Boston University School of Education, which provides for the actual up-keep of the service and gives it the necessary quarters.

Mr. Abraham Krasker reports that during the year this service recorded about two thousand classroom showings and about two hundred thousand pupils seeing the films. The present library of one hundred reels is about solidly booked for the remainder of the school year, and plans are now underway for the extension of the service.

Efficiency in Visual Instruction

(*Concluded from page* 38)

not delegated to the work of one specific person, teachers are unable to give to their pupils the valuable instruction furnished by a well planned visual program. The fact that the scheduling of various visual aids for specific dates, and the work incidental to the showing of them as they arrive does require considerable time and forethought, precludes what might otherwise be a wide use of them. The teacher is already loaded down with preparations for five or six classes each day; the coaching of a school play that must be given in the near future; the sponsoring of a school club; extra time that should be given to helping backward pupils who cannot see through Graham's law of diffusion, and any number of other activities, extra-curricular and otherwise. This teacher cannot be blamed for refusing to load on the additional work which a well planned visual program would entail.

In the hands of the conscientious teacher, and with the projection part of it efficiently organized, visual education can become a vital and very worthwhile aid to both teacher and pupil. Words, even when reinforced by illustrations from texts, are not nearly so effective as they can become when the pupils can be shown visually, the subject matter under consideration. It is seldom possible to take a class through a steel plant, but the steel plant can be brought to the class in the form of an excellent five-reel motion picture. The writer is thoroughly sold on the educational value of visual instruction, and this opinion is based upon personal use of visual aids over a period of years, and observations on the use of visual aids by approximately forty-five different teachers who each semester for the past seven semesters, have made this type of instruction an integral part of class work.

Many teachers, when pupils drift along from week to week making no apparent effort to master the subject matter being presented, take the path of least resistance and too soon, catalogue these pupils as failures. We have all heard this attitude of the pupil toward his work explained by a "lack of ambition," "poor choice in associates," an "athlete's head," "a low IQ," or to any one of many other reasons. In other words, the teacher does anything but analyze matters from the pupil's point of view. We would all be better instructors if periodically, we could sit through one of our own classes. I believe I have had pupils who would have failed in my class had I not worked earnestly to get them interested in what I had to present, and the use of visual aids has been a decided asset in arousing this interest. This has been the experience of all the teachers in this building, who have a semester visual program.

News and Notes

Conducted by JOSEPHINE HOFFMAN

Character Training Project

A unique character education program which utilizes suitable situations from current theatrical motion pictures to teach a moral lesson, is being worked out by Dr. Howard M. LeSourd, dean of the Graduate School of Boston University, and his committee on Social Values and Moving Pictures. Twenty-four of such one-reel excerpts are planned to compose an entire series, titled *Secrets of Success,* which will be supplied on 35mm sound film to educational and social agencies throughout the country.

The first ten demonstrated pictures in the series have been taken from the following films: *Huckleberry Finn, Skippy, Sooky, Broken Lullaby, Cradle Song, Sign of the Cross, Young America, Alias the Doctor* and *Tom Sawyer.* The pictures have been designed to suit three age groups, children, adolescents and adults, although some of them will serve equally well for all age levels.

The first year is termed a "demonstration period," during which time reactions of teachers and pupils in the use of the series will prove the value of this addition to the resources of character developing agencies. There will be no rental charge for non-theatrical use of the films during this period. Physical distribution of the pictures will be conducted directly from the office of the Motion Picture Producers and Distributors of America, but requests for the use of the films should be sent to Dr. Howard M. LeSourd, 688 Boylston Street, Boston, Mass.

Canadian Explorer Uses 16 mm. Films For Lecture Work

Richard Finnie, writer, lecturer, motion picture photographer, and authority on the Canadian Far North, has just completed a tour of more than half a hundred Canadian cities, delivering a notable north-country lecture, *The Last Frontier,* illustrated with 16 mm. motion pictures taken this past summer with a Filmo camera.

Mr. Finnie's lecture deals with the miracles of pioneering accomplished in the northward upsurge of civilization incident to the discovery of radium, silver, and other valuable ores on the shores of Great Bear Lake, the third largest lake in North America—a lake which is bisected by the Arctic circle.

Mr. Finnie, who was born within a stone's throw of the Arctic circle and who, although still in his twenties, is a veteran of six Arctic expeditions, is using 16 mm. motion pictures for lecture work for the first time in his platform career.

Museum Preserves Valuable Historical Exhibits

The Los Angeles Museum collection of historical motion picture and other visual equipment, maintained by the Society of Motion Picture Engineers with W. E. Theisen as chairman of the Historical and Museum Committee, contains valuable exhibits which should form a valuable record for posterity.

An Edison projector of the type introduced about 1901, for instance, is on display there. It is complete with an arc light, double lenses for stereo projection, lantern slide arrangement and various devices used by a projectionist of the time. The projector was semi-portable and was contained in a wooden box so that the whole equipment could be carried about.

Among other interesting items is a magic lantern with hand-painted slides of about one hundred years ago. The slides were panoramic views, and as the lantern used only a candle for illumination, only a small portion of each slide could be shown at a time. A large collection of hand-painted travel and astronomical slides of about 1825-35 has been located and purchased for the exhibition. They are circular and vary in size from three inches in diameter or less. Each slide glass is mounted in a wooden frame. Among the astronomical slides is one entitled "A Diagram that Proves the Rotundity of the World."

Motion Picture Division Film Report

The Motion Picture Division of the New York State Education Department reviewed and licensed 1769 films previous to their exhibition in the state, during the year beginning July 1, 1933, and ending June 30, 1934, according to the annual report submitted by Irwin Esmond, Director of the Division, to Commissioner of Education Frank P. Graves. Of these 1769 films, 286 were approved with eliminations. Fifteen pictures were rejected entirely, of which two were later revised and approved with eliminations.

In his report Mr. Esmond said:

The fact that 8362 reels of film were reviewed during the year, that 15 pictures were rejected outright, and that 2195 eliminations were made on statutory grounds, will give some idea of the amount of work that is done.

The 2195 eliminations are classed as follows: indecent, 838; inhuman, 79; tending to incite to crime, 511; immoral or tending to corrupt morals, 752; sacrilegious, 15.

The Film Estimates

Being the Combined Judgments of a National Committee on Current Theatrical Films
(The Film Estimates, in whole or in part, may be reprinted only by special arrangement with The Educational Screen)

Babbitt. (Guy Kibbee, Aline MacMahon) (Warner) Very popular small-town real-estate dealer, a goodnatured fathead, lumbers into crookedness and near disgrace; but flounders out a hero, thanks to his devoted and brainy wife. Homely, realistic comedy of Main Street folk affording semi-intelligent amusement.
A—Fairly good Y—**Amusing** C—Little interest

Biography of a Bachelor Girl (Ann Harding) (MGM) Heroine, touted much as girl-artist of lurid past, is hired by dynamic young sensation-seeking editor to do her biography for his tabloid. Talky sophistication. Ann Harding miscast. Unconvincing as a whole.
A—Only fair Y—Not good C—No interest

Bordertown (Paul Muni, Bette Davis) (Warner) Political influence disbars self-educated, idealistic young Mexican-American attorney. Embittered, money becomes obsession. As gambling racketeer, achieves wealth, also disillusionment and true sense of values. Strong, finely acted, often ugly and depressing drama.
A—Good of kind Y—Better not C—No

Clive of India (Ronald Colman, Loretta Young) (U. A.) Outstanding historical spectacle, splendidly acted, set, and directed, giving strong, well-rounded, reasonably accurate picture of the famous Englishman, his personality and monumental achievements for his ungrateful country. A masterpiece.
A—**Excellent** Y—**Excellent** C—Very strong

County Chairman (Will Rogers, Evelyn Venable) (Fox) County politics in Wyoming thirty years ago with typical western background. County chairman's young law-partner runs for office, defeats old-line politician and wins the daughter. Rich, engaging role by Rogers as clever manipulator of whole situation.
A—**Entertaining** Y—**Very good** C—**Good**

Enchanted April (Ann Harding, Frank Morgan) (RKO) Weak, unsatisfying picture about lonely English wives seeking freedom in charming Italian setting. Light picture of mood, with meagre plot and almost no dramatic action, conflict or development. Comic role by Reginald Owen perhaps best feature.
A—Disappointing Y—Little interest
C—No interest

Father Brown, Detective (Walter Connolly, Paul Lukas) (Paramount) Chesterton's priest, translated to screen with sympathy and reality, persuades polished Continental jewel thief to return jewels and accept prison term. The drama would be better and whole play more enjoyable with slightly less of Father Brown.
A—Rather good Y—**Very good**
C—Probably good

Gambling (George M. Cohan) (Fox) Chronic gambler hero bends all energies to solve killing of adopted daughter. Does various pretensiously clever things, talks banal English through twisted mouth, and even sings. Confused, sluggish action offered with air of being clever.
A—Mediocre Y—No C—No

Gilded Lily, The (Claudette Colbert, Fred MacMurray) (Paramount) Colbert charming and clever as romantic stenographer imagining she loves glamorous, incognito English aristocrat, but learning finally it is her prosy pal, the engaging reporter who brought her fame, that she loves. Character comedy, good dialog and acting.
A—**Amusing** Y—**Very amusing** C—Hardly

Grand Old Girl (May Robson) (RKO) Usual excellent work by Robson as dynamic, irresistible veteran Principal of small-town High School, fighting to the last for her pupils' welfare. But meagre action, much anticlimax, bizarre and unconvincing episodes weaken well-meant propaganda.
A—Disappointing Y—Little interest
C—Less interest

Here Is My Heart (Bing Crosby, Kitty Carlisle) (Paramount) Typical musical comedy a la Crosby, with hero spending his first "million" to gratify his crazy whims and finally winning heroine. Bing sings as usual, also acts as usual. Some choice comedy by Roland Young and others is real feature.
A—Good of kind Y—Probably good C—Hardly

I Am a Thief (Mary Astor, Ricardo Cortez) Complex mystery stuff on board Simplon-Orient express while diamond-robbers and detectives chase each other, audience in doubt as to which is which until detective-heroine and thief-hero fall in love. Usual dark doings by none too good a cast.
A—Perhaps Y—Not good C—No

I Sell Anything (Pat O'Brien, Claire Dodd) (Warner) Crude glorification of crooked auctioneer as painfully conceited hero, brazenly tricking public, rising to bigger and better swindling till cleverer crook swindles him and sends him back to his first racket. Racketeering at its cheapest.
A—Crude Y—Unwholesome C—No

Jealousy (Nancy Carroll, Donald Cook) (Columbia) Conceited prize-fighter and little heroine plan marriage but wrangle endlessly because of his insane unjustified jealousy. Most sensational "cure" is accomplished, of which the grim and morbid aspects remain in spite of the surprise ending.
A—Hardly Y—Unwholesome C—No

Lives of a Bengal Lancer (Gary Cooper, Franchot Tone) (Paramount) Foggy title for gripping story of English soldier life in India's frontier service, drudgery and danger, treachery and tortures. Character interest and amusing dialog ease grim, sinister atmosphere. Smashing climax brings death for hero and villain.
A—**Very good of kind** Y—Thrilling
C—Too strong

Music in the Air (Gloria Swanson, John Boles) (Fox) Light, wholesome but far-fetched comedy with character interest and romantic appeal, against delightful background of Bavarian village life. Rest is dull wrangling by two temperamental stars, Boles trying to be funny and Gloria to sing.
A—Feeble Y—Fairly good C—Harmless

Man of Aran (Native cast) (British production) Another masterpiece by Robert Flaherty, portraying powerfully the ceaseless struggle for life on bleak, rocky Aran Islands. Human document with little dialog, few titles, three characters, no plot, and relentless sea as mighty background for gripping action.
A—**Notable** Y—**Impressive** C—Perhaps

Night Is Young, The (Ramon Novarro, Evelyn Laye) (MGM) Mythical kingdom costume romance, with tuneful music by Romberg and Hammerstein, about the usual prince who loves a chorus-girl but must marry princess for country's sake. Lightweight but always pleasant. Some real comedy by Merkel, Horton and Butterworth.
A—**Pleasant** Y—**Amusing** C—Hardly

Night Life of the Gods (Alan Mowbray, Florine McKinney) (Universal) Wildly preposterous farce about half-mad inventor who learns to turn flesh to marble. He brings museum gods and goddesses to life for dizzy round of fun in cabarets. Then turns himself and everybody else to stone for conclusion. The lovely heroine is 900 years old.
A—Absurd Y—Perhaps C—No

President Vanishes, The (Arthur Byron, Paul Kelly) (Paramount) Excellent melodramatic thriller about ruthless financiers driving the country into war for their profit, controlling public by press and legislature by lobby, defeated only by heroic president by unheard-of trick. Notable cast. Rather thought-provoking.
A—**Entertaining** Y—**Very good**
C—Very exciting

Prince of Cash, The (Robert Donat) (British production) Old Donat picture trying to benefit by his later great success in Count of Monte Cristo. Stolen banknotes, accidentally in hero's hands, trickily used by heroine's father to promote his crooked schemes. Painful overacting by father.
A—Mediocre Y—No value C—No

Private Life of Don Juan (Douglas Fairbanks) (London Films-U. A.) Elaborate costume play aimed to glorify Don Juan in his closing career of balcony climbing conquests. Artificial, episodic story, uninspired dialog, and star's voice and acting are not impressive. Will do the Fairbanks reputation very little good.
A—Feeble Y—Certainly not C—No

Secret Bride, The (Barbara Stanwyck, Warren William) (Warner) Above average drama of political intrigue with well-knit situation. District attorney, just married to heroine, must prosecute her father, an honest governor cleverly framed by unsuspected enemies. Suspense strong. Well-acted thriller with stupid title.
A—Good of kind Y—Good thriller C—Hardly

Secrets of the Chateau (Claire Dodd) (Universal) The desire of most of the cast to gain possession of valuable Gutenberg Bible affords many suspects of the theft and two murders committed in French chateau. Weak, uninteresting drama, with little suspense and dubious ethics.
A—Inferior Y—Hardly C—No

Sweet Adeline (Irene Dunne, Donald Woods) (Warner) Costume romance of the '90's, with poor composer-hero, and charming work by Irene Dunne as humble singer who rises to the heights, despite a triangle of villain and villainess. Some historical interest but too burlesque for historical value.
A—Fairly amusing Y—**Amusing** C—Fair

West of the Pecos (Richard Dix, Martha Sleeper) (RKO) Zane Grey western about southern colonel, ruined after war, starting west with daughter. Finds new home, excitement, many troubles and a hero who saves day and marries his daughter. All ingredients of frontier life. Above average western.
A—Hardly Y—**Good** C—If not too strong

White Lies (Walter Connolly, Fay Wray, Victor Jory) (Columbia) Starts as human picture of hard newspaper magnate who prints sensation whoever suffers. Becomes hectic melodrama of shootings and heroics, with pitiful worm for villain and super-hero. Strained coincidence and over-sentimental moments.
A—Fair of kind Y—Possibly C—Not good

Woman in the Dark (Fay Wray, Ralph Bellamy) (RKO) Sensational, unconvincing stuff in exceedingly bad taste, with cheap emphasis on sex. Accidental killing jails hero. Released, he seeks seclusion but becomes victim of brutal villain trying to frame him from jealousy over heroine. Innocent vindicated, of course.
A—Poor Y—No C—No

The Church Field

A Seminary Class Goes Exploring in the Visual Field

By ROBERT M. HOPKINS JR.
Yale Divinity School, New Haven, Conn.

YALE Divinity School is this year offering a course in the use of visual aids in church programs, under the guidance of Dr. Paul H. Vieth, Associate Professor of Religious Education and Director of the Department of Field Work. This course is offered on the theory that the development of adequate resources and methods of using them is dependent upon the training of ministers and other users. The course is called a Practicum, which means that it is conducted on the seminar basis to make original research possible. It meets for two hours once a week in a room especially equipped for projecting pictures.

The immediate impetus which made the course a reality was the interest taken by the Religious Motion Picture Foundation in New York City. This philanthropic organization since its beginning in 1925 has been devoted to the task of making inspirational and educational films for use in churches. Recognizing the value of interesting a large seminary in their work the officers of the Foundation agreed to do three things. First, they trained a student assistant, who was to be placed in charge of handling equipment and giving technical advice at the Divinity School, by having him serve as an apprentice in their New York office where he became familiar with the taking and editing of pictures and the use and care of equipment. Secondly, the Foundation's entire supply of film has been made available for experimentation by members of the Practicum. Finally the Foundation has offered to lend technical aid in the form of camera-men and scenario criticism when we begin to make our own pictures.

The Yale University Press has also made a valuable contribution to our work. In order to develop the use of the *Chronicles of America Photoplays* as inspirational and worship material, the University Press provided us with a complete set of this forty-seven reel series of pictures, a Model K-50 Kodascope Projector, and a screen. The Chronicles series consisting of fifteen episodes in American history, are primarily historical pictures and were not intended for religious use, but we have found that there is a distinct spiritual message in some of the episodes, particularly *The Pilgrims* and *The Puritans*.

We had thirteen students and two professors in the class during the first term of the school year. In most cases membership came by invitation. Our aim was to secure students who were doing Field Work which would be suitable as experimental points for projects. Our available equipment consists of the projector already mentioned, another Kodascope projector, a Victor stereopticon, a Reflectoscope for projecting postcards and photographs, an excellent four by six folding screen, and a slide library belonging to a lecturer who keeps his material at the Divinity School and makes it available to students. A short time ago we also purchased a Simplex Casette projector, which we have found to be a satisfactory inexpensive machine. A charge of fifty cents for a movie projector and twenty-five cents for a stereopticon is made to cover servicing. Each person who rents a machine is given operating instructions by the student assistant in charge of equipment. One of our weaknesses at the present time is that we do not have movie film to rent out. The Chronicles pictures are available for experimental work only, and we have not as yet purchased any other film which would be suitable for our work.

Our school year at Yale is divided into three terms. We have blocked out our program for the course as follows: Fall Term—Exploration, Winter Term—Definite Experimental Projects, Spring Term—Creative Work. In accordance with this schedule our efforts so far have been largely to secure orientation with secondary concern for constructive results. Our aim has been to become familiar with equipment and available slide and film sources. Various commercial concerns have sponsored demonstrations to show us their materials and have offered to make their products available at reduced rates. We have spent practically all our time on 16mm silent pictures, only one class period having been devoted to examining a 16 mm sound-on-film projector.

Under the leadership of members of the Practicum fifty-five programs using motion picture film have been presented during the Fall Term. Visual aid equipment belonging to the Divinity School has been used in a total of one hundred and eighty-five programs as compared with seventy-one over the same period last year, which gives some idea of how visually minded Yale has become. Only a few of the outstanding Practicum projects will be mentioned here. Twelve of the Chronicles episodes have been shown in a series of Sunday evening services in a New Haven church. The best single program in this series was a Pilgrim service using a combination of slides and

(*Concluded on page* 54)

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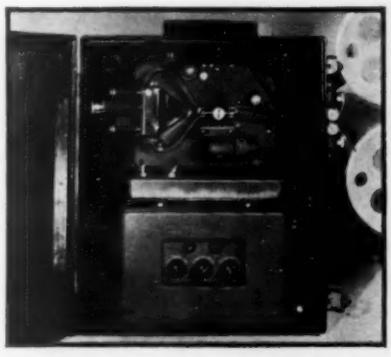

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Among the Magazines and Books

Conducted by MARION F. LANPHIER

Illinois Teacher (December, '34) "The High School Goes Hollywood," by Otis Keeler.

Marshall Township High School for about five years has been trying by many kinds of programs, appealing to the community, to acquaint it with the value of the High School as an institution deserving tax support. In 1932, pageantry, pantomime, and steropticon slides were used, the latter when seven spirits representing the seven cardinal principles of education appeared in turn. Each told how she was nurtured by the subject of the curriculum as appropriate slides were projected. In 1933, the history of the school, for the 53 years of its existence, was represented by slide views of photographs of former classes and leaders of the school. A slide map gave the location in the United States of all graduates. Other slides emphasized the present work of the school. The future, based on Snedden's, "The High School of 1960," was prognosticated. The best results seem to have been obtained in 1934, when activities of all departments were shown at commencement time in the movies. A graduate of the Terre Haute Polytechnic High School was engaged to take views throughout the year. The superintendent says, "As a means of interpreting the High School to the public, I doubt if any other plan would be equally effective with such a project." The film is to be used in outlying communities to show what high schools are doing.

Educational Method (January, '35) "Audio-Visuai Instruction Materials," by Howard E. Gray.

A lengthy table is given listing the number of educational subjects available in sound pictures, 16 and 35 mm., for the years, 1930, '31 and '32. The supply doubled (in round numbers) each of these years. The table specifies the number of available films for each of a large number of branches and subjects, but does not give the names of many individual films. President Hutchins of the University of Chicago is quoted as follows: "We believe that the teacher will find this new dynamic medium of expression an authentic aid in his work and that the student will acquire a clearer and more lasting understanding of scientific processes when they are vitalized by scene and sound."

Education (December, '34) "Motion Pictures in Art Education," by Elias Katz.

Two lectures delivered at Teachers College, Columbia University, are here given in substance. In Russia, 95 per cent of the films are educational or cultural. Our insistence upon factual data has hampered the true use of the film. France is giving an important place to the film in art education. After a description of various attempts to use films in art, stress is placed upon the Metropolitan Museum of Art Film Library, and Models in Motion distributed by the Museum. It had been observed that children who attended movies sometimes attempted to draw movement. The films of models in motion are being used in Boston, Rochester, and at the Art Institute in Chicago. Through art education by the film, verbal ambiguities are avoided. As the film represents a temporal continuity of visual experience, the author seems to think that it affords the student a better opportunity to study movement than by first-hand observation of moving objects. We recall that movement is implied in many works of art, and that it is very difficult to so imply it.

International Review of Educational Cinematography (November, '34) "Utilizing the Cinema for Teaching Abnormal Children," by Prof. M. Prudhommeau.

Especial pains must be taken with this class of children to have them properly prepared for the film presentation. "On these children's *psyche* the motion picture produces a violent effect that is much stronger than that deriving from any other teaching means. We must take consistent care to avoid errors of interpretation." The child should not be excited by the film, but each lesson should be completed with a film that will not make him hypersensitive or nervous.

The writer thinks that a screen about two feet in width is preferable to a larger one for the ordinary classroom. Children are more sensitive in a darkened room. For producing geographical reality, views of nature alone are projected at times on the whole rear wall of the classroom by using a short focal length lens. An eight foot screen is used for the nearest approach to nature. A caution is given against stopping the film too frequently, and breaking the continuity where the action does not demand an explanation. "The greater the silence, the better the impression made by the film." Necessary comments can be sometimes made when the action is slowed down, but they must be precise and brief.

Stereoscopic projection has been abandoned by the author, but fixed projections taken from the proper angle and with a special light, as well as landscapes in close-up movement, may produce re-

(*Concluded on page* 56)

School Department

Conducted by DR. F. DEAN McCLUSKY
Director, Scarborough School, Scarborough-on-Hudson, N. Y.

The Kindergarten and First Grade Children Can Make Slides

I HAVE experimented for some time trying to find a simple way for little children to make their own slides. The little ones are not able to use inks and paints. Ground glass strains their eyes. Transparent paper placed between the glass was unsatisfactory, because the children could not see the process as a whole. Further, these slides took time to bind and to take apart for using again.

After trying these and other methods, I bound a single plain glass slide. The child places this slide on a piece of white paper, and draws his picture right on the glass with a china marking crayon. (China marking crayons can be obtained at any art store.) If any mistake occurs, it can be rubbed off with a bit of cloth or soft paper. (Rubbing off the slide to use again is a matter of seconds.)

A little child is handicapped in expressing his ideas, because his vocabulary and his ability to group words in new relationships is limited. Free drawing is the best means he has of telling us what is going on in his mind. He needs to be encouraged to draw. The best result in drawing I have ever had, not only in freedom of expression but also in originality and connected thought, has been through allowing those children who drew good pictures to make them again on slides. Then the stereopticon was connected, and each child in turn told the class about the picture he had made on the slide. The children's language ability was helped greatly at this time by questions, comments, and corrections.

On the other hand often I have a free drawing period when every child in the class makes a slide, and has a chance to talk about it when the pictures are thrown on the screen at the close of the lesson.

Once these slides are bound the teacher's part is done. These slides are inexpensive, extremely effective, and inspirational to the children.

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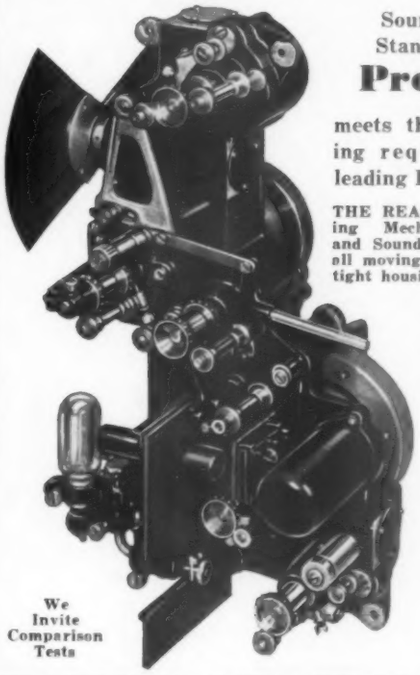

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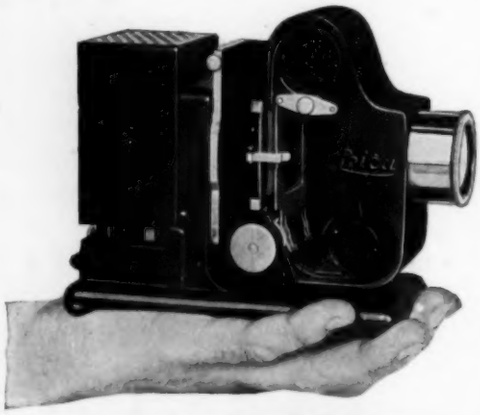

The* UMINO PROJECTOR *for Miniature Pictures

LEICA as well as other pictures are reproduced in all their full, rich beauty by this projector. Ideal for school room projection, being small, easy to operate, and inexpensive. Single frame, double frame and 2x2 in. glass slides may be used. Write for Circular No. 1230, also full information about the LEICA Autofocal Camera and photographic accessories.

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Converts the LEICA into a copying camera for making reproductions of maps, manuscripts, books, bindings, scientific specimens, etc.

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60 EAST 10TH ST. NEW YORK, N. Y.

South High School Exhibit Night

ON NOVEMBER 23, 1934, South High School held its second Science Night. Over 5,000 people crowded the halls, examining the 378 exhibits which were on display. A program of the exhibits was given to all persons attending.

The Chemistry Department had the greatest number of exhibits, totaling 117. The feature of these exhibits was a series of experiments with liquid oxygen at a temperature of -193 C. and on the same table the Thermit Welding produced a temperature of about 1200 C. Exhibits on the panning of gold, oil floatation, cosmetics, and plastics all contributed their part in interesting those who attended the meeting. Thirty gallons of synthetic lemonade made from citric acid and saccharine were distributed during the evening.

The Physics Department displayed 53 exhibits, the high light of which was a most interesting display on air conditioning. A short wave broadcasting receiving station was in operation. A most interesting dial telephone switchboard was in operation, while various Neon lights and electric eyes furnished amusement for many.

The Biology Department had many interesting animals, including an armadillo, butterfly exhibits, and the effects of various pests on fruits and vegetables. This department had a total of 55 displays.

The Latin Department contributed a most interesting display on the relation of Latin to Science, showing the development of many of our modern ideas from the old Latin devices.

Four telescopes in constant use helped the Astronomy Department, and the crowds which gained their first telescopic glimpse of Saturn through these telescopes were more than pleased.

One of the outstanding displays of the evening was furnished by the Home Economics Department which gave a most wonderful display on consumer education. Over 40 displays were furnished in this field, including: "How Many Pairs of Silk Stockings Do You Wear a Year?", "Do Labels Tell You What You Want to Know?", "Ready Made vs. Home Made Dresses," "What Are You Getting in Milk?", "Durability and Price of Furs." Another exhibit which roused considerable attention was one obtained from the United States Government Pure Food and Drug Division showing the effects of various types of cosmetics and drugs sold on the market today.

The Psychology Department was crowded all evening with an interested group learning various things concerning personality, complexes, illusions, palmistry, and superstitions. This department furnished a tremendous lot of food for thought in their various displays.

(Concluded on page 54)

Visual Aids

of Special Design

Help to Solve

A

Perplexing Problem

For years educators have sought for the reason why some children learn to read with ease while others, apparently equally gifted, find in reading an insurmountable difficulty.

Dr. Emmett Albert Betts, of State Normal School, Oswego, N. Y., after making hundreds of tests on first-grade entrants, has formulated a simple visual procedure by means of which a teacher may determine whether a child is—

Ready to Read

What His Reading Difficulties Are
What Remedial Methods to Use

Superintendents and Supervisors

Should See

The Betts Ready to Read Tests

at the

Keystone Exhibit, Atlantic City

Published by
KEYSTONE VIEW COMPANY
MEADVILLE, PENNA.

Specify DeLuxe

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COMPLETE

The engineering skill of this World Famous Manufacturer has designed these outfits to give schools the identical picture and sound reproduction of professional theatre character. Easy to operate by amateurs, anywhere. Includes PROJECTOR, AMPLIFIER and SPEAKER.

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DA-LITE

Modernized Motion Picture Presentation

Visual education demands efficient presentation. With 15 different types of portable screens, each ideally suited to a given condition, Da-Lite offers you exactly the type of screen you need. Comparisons invited. Write for descriptive folder or see your local dealer.

NEW PORTABLE PROJECTOR STAND

Fits all standard 16 mm. projectors. Fully adjustable folding tripod type. Permits overhead projection. Ask for details.

Da-Lite Screen Co., Inc.
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Chicago, Ill.

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IN MIND!

• Education marches forward!

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NON-THEATRICAL DEPARTMENT

Universal Pictures Corporation

ROCKEFELLER CENTER NEW YORK, N. Y.

As a side show nearly 50 boys and girls displayed hobbies in which they were interested. Exhibits of old guns, stamps, perfume bottles, airplanes, leaves, marionettes, archery, play equipment, war relics, and mountain climbing material helped make this section one of the most important displays of the evening.

Much more might be said concerning the work of the Art Department which furnished nearly 30 beautiful posters, of the Mechanical Drawing Department which produced nearly 600 signs to label each exhibit, and the library which contributed greatly to the Science Night with an exhibit, as well as material assistance in obtaining information for various displays.

A band concert and motion pictures in the auditorium aided in entertaining our patrons when they grew tired of visiting the exhibits. Two motion pictures were shown, the finer of which—"The Eyes of Science"—is especially worth while. In all, this Exhibit was the finest showing of its kind that has ever been produced in the Denver Schools.

ROBERT COLLIER, JR.
South High School, Denver, Colo.

The Church Field

(*Concluded from page* 48)

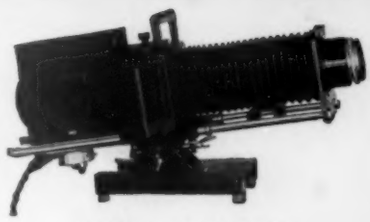
the movie. Slides pertaining to the Pilgrims were projected during an antiphonal responsive reading, a different slide being shown for each verse of the response. Appropriate organ music was played while the three reel picture was shown. In another church we discovered the importance of victrola music as sound accompaniment. A music store in New Haven loaned us a supply of records, and then by using two victrolas and shifting from one to the other were able to arrange a highly satisfactory accompaniment. Several gratifying experiments have also been carried out in the teaching field. A reel on the life of Christ was used in a seventh grade class of rather boisterous youngsters. The attention was unusually good and the amount of information retained by the children was high. If financial obstacles could be overcome there certainly are great possibilities for movies in Sunday Schools.

We are finding that our work is reaching out into other departments of the Divinity School. The connection with the Field Work Department creates a demand for visual aid equipment in student pastorates and other student locations. The Old and New Testament Departments will probably make use of visual aids. One of our New Testament professors who is now in Palestine has written us about film slides on the Holy Land that he has seen and hopes to secure for us. The Department of Social Ethics is interested in helping us make a movie which will portray the spirit of Christ at work in the city of New Haven. These interests are indicative of the possibilities of visual aids in religious work.

A Spencer DELINEASCOPE

Decreases Failures In This Class Room . .

STUDENT tests in school show that teaching visually enables students to learn more quickly . . and to retain the knowledge over a longer period of time. ● Visual teaching . . with a Spencer Delineascope . . will raise the average grade of your classes. ● There is a complete series of Spencer Delineascopes, one of which will meet the specific teaching requirements of your school perfectly. Our projection experts will gladly assist you in selecting the proper Delineascope for your work.



MODEL D DELINEASCOPE
For daily classroom use. Projects glass slides only.

Write to Dept. R-2 for Folder K-77 which completely describes, with prices, the series of Spencer Delineascopes.

There is no Substitute for the Superiority of the Spencer Delineascope Optical System

Spencer Lens Company
BUFFALO NEW YORK

BRITELITE TRUVISION MOVIE PRODUCTS
For Perfection in Projection

De Luxe "A" Beaded Screen

22 x 30	$12.00 List	39 x 52	$22.50 List
30 x 40	15.00 List	45 x 60*	35.00 List
36 x 48	17.50 List	54 x 72*	75.00 List

*No Border

Britelite-Truvision Motion Picture Screens have achieved a reputation for outstanding merit. Their advanced design provides exceptional projection performance—to an extent never attained before. They come in a wide variety of styles including folding (illustrated), back board, metal tube and easel models. They assure brilliance, color, depth and sharp definition.

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or write for complete catalog of other
BRITELITE TRUVISION MOVIE PRODUCTS

MOTION PICTURE
SCREEN & ACCESSORIES CO.
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Syncrofilm Sixteen *Sound Projector*

Syncrofilm Sixteen features simplicity, high quality, and outstanding performance, at low cost.

Has ample volume for large auditorium yet equally adaptable to class room use.

Will operate silent films as well as sound.

The latest in 16mm. sound projection.

LET US TELL YOU MORE ABOUT SYNCROFILM SIXTEEN.

Weber Machine Corp.
Manufacturers of 35 mm. and 16 mm. Sound Projectors
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New York Sales and Export Department
15 Laight St., N. Y. C. -:- Cable: Romos, N. Y.

16 MM. SOUND-ON-FILM

Free catalog of hundreds of subjects, all new prints, late releases, educational and entertainment.
We rent 16 MM. SOUND-ON-FILM projectors by DAY, WEEK or MONTH.
Our 64-page FREE catalog also lists hundreds of 35 mm. silent and SOUND subjects, and 16 mm. silents.
IDEAL PICTURES CORPORATION
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Unexcelled Service
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PRINCIPLES OF PHYSICS The visualization of high school physics on still film for classroom use.
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Descriptive literature and sample strip of typical frames sent on request. Address:
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RADIO-MAT
Talk from your screen with quickly TYPEWRITTEN MESSAGES
50 Radio-Mats $1.50
White, Amber, Green
Accept no substitute
IS THE STATIONERY OF THE SCREEN
The Typewriter Slide For Screen Projection
FOR SALE BY YOUR THEATRE EQUIPMENT DEALER
Write for free samples.
RADIO-MAT SLIDE CO., Inc.
1819 Broadway New York, N. Y.

Among the Magazines

(*Concluded on page* 50)

lief effects. Photographs reflected in a concave mirror are a satisfactory method of intensifying perspective. Abnormal children are greatly delighted with the reality of microscopic life projected on the screen.

Before a film lesson, observation lessons are given on museum objects, or other relevant materials. Drawings of what has been seen are then made, and the film follows at the next lesson. Drawings are made of film objects, and they are explained on the back of the drawing. The pupil explains his drawing, and errors are then corrected. The diction of the child is noted in these descriptions given verbally, and use is made of the child's individual vocabulary in teaching language. The oral account helps to fix the subject in the memory.

"An inquiry we made showed us with a certain definiteness and precision the poverty of knowledge of an abnormal child in the matter of facts of common knowledge and happenings. The motion picture allows him to grasp many things which it would otherwise be difficult to instil into his mind. The abnormal child is almost always a 'visual case'. Words and phrases pass over him without making any impression, because he does not understand their meaning, while the cinema, owing to its movement, . . . brings the child multiple means of acquiring cognitions." The abnormal child picks up a surprising number of undesirable cognitions also from motion pictures. The creative faculty is encouraged to a surprising extent when films are used with abnormal children.

An interesting description of the special projection hall is introduced,—the tinting of the walls, the tone of the light bulbs affording the opportunity for taking notes, the regulation of the lighting for different circumstances by a special rheostat, etc. Finally, full cooperation between the educator and the producer is strongly recommended.

Research Bulletin of the National Education Association (November, '34) "Modern Social and Educational Trends."

The illustrated bulletin is a most excellent presentation of fifteen main features and tendencies of society today. Each section is from two to six pages in length and is illustrated by pictorial graphs of the Neurath type, involving international standard units of measurement. An assistant of Dr. Neurath in Vienna, for seven years, has worked with the N. E. A. Headquarters Staff in producing the brochure of about forty pages.

SILENT PROJECTORS:
We have the finest 500 watt 16mm., silent projectors manufactured, priced from $85.00 up; write to us! Also 200 watt projectors as low as $29.50 . . . every one a brand new model!

SOUND-ON-FILM PROJECTORS:
The very best 500 watt and 750 watt 16mm. Sound-on-film projectors priced from $275.00 up—write to us—also Sound-on-film 16mm. projectors as low as $195.00 . . . every one a brand new model!

CAMERAS, SCREENS, ETC.:
CAMERAS: All makes and all prices from $35.00 up to several hundred dollars—both new and also slightly used!
SCREENS: We have all makes in glass beaded, etc., from $7.20 for the 30"x40", up to $80.00 for the largest auditorium size glass-beaded screens.
WRITE TO US, WE WILL SAVE YOU MONEY!

Sunny Schick
National Brokers Cinemachinery & Photographic Equipment
407 W. WASHINGTON FORT WAYNE, INDIANA

Important EASTMAN RELEASES

FINLAND—Fourth of a new series of Geography films on European countries. Prepared with the same care that has made earlier Eastman Classroom Films the standard of motion-picture instruction material. Other subjects in this series now ready for distribution: *Denmark, Sweden, Hungary*. Each of these films gives pupils a comprehensive, up-to-date, stimulating picture of the country under consideration. One-reel 16-millimeter subjects. $24 each.

STREET SAFETY—Two films on a vitally important subject. *Street Safety, for Advanced Grades* illustrates safety principles designed to govern activities of older children or adults. 1 reel, 16-millimeter, $24. *Street Safety, for Primary Grades*, intended for smaller children, demonstrates cardinal points of safety by the indirect method. 1/2 reel, 16-millimeter, $12. Both pictures made in coöperation with the National Safety Council and the American Automobile Association.

MODERN FOOTBALL FUNDAMENTALS—A 2-reel picture directed by Harry Kipke, Head Coach, University of Michigan. It shows, both in slow motion and at normal speed, the fundamental techniques and drills, at the same time demonstrating definite methods of handling the body to prevent injuries. Reel I, *Drills for Individuals and Small Groups*. Reel II, *Group and Team Drill*. 2 reels, 16-millimeter, complete, $48. A splendid investment in connection with spring football practice.

Over 200 Films From Which To Choose

THE number of Eastman Classroom Films now available totals considerably more than 200 reels. They cover important topics of Geography, Science, Health, Nature Study, History, Agriculture, Applied Art, and English. Check your film library against the latest *Descriptive List of Eastman Classroom Films*. In case this has not reached you, drop us a line, and a copy will be sent to you promptly.

Be on the lookout, too, for *The Classroom Film*, a new publication that offers an opportunity for an interchange of ideas among all those engaged in visual instruction. If you do not receive a copy, write us, and your name will be added to our list. There is no charge. Eastman Kodak Co., Teaching Films Division, Rochester, N. Y.

Eastman CLASSROOM FILMS

Among the Producers

Where the commercial firms—whose activities have an important bearing on progress in the visual field—are free to tell their story in their own words. The Educational Screen is glad to reprint here, within necessary space limitations, such material as seems to have most informational and news value to our readers.

16 mm. Sound Camera Appears

RCA Manufacturing Company announces the appearance of the first amateur sound camera with which anyone can now make his own "talkies." The new sound camera utilizes film 16 millimeters wide with sprocket holes on only one side and a narrow track on the other side for recording the sound. In appearance and size it differs only slightly from the silent amateur movie camera, and though it incorporates a complete sound recording system, it weighs only 8¾ pounds fully loaded.

In operation, the photographer talks into a mouthpiece imbedded in the back of the camera as he focuses on the subject. Behind the mouthpiece a vibrating metal diaphragm coupled mechanically to a tiny mirror is set in motion by the voice. A light beam directed on the mirror is reflected, with its fluctuations, on to the sensitized edge of the film as it passes through the camera. For recording outside sound effects as well as the persons being photographed, a separate microphone attachment together with electrical amplifying and recording equipment are provided for convenient mounting on a tripod, on which the camera is also placed. The total overall weight for this equipment is 20 pounds.

The new sound camera is already finding an interesting application in the work of Dr. Kurt Lewin, Professor of Child Psychology at Cornell University. The recording microphone and camera are concealed behind familiar objects in a room so that the subjects do not know they are being observed, and a sound motion picture record is made of children's reactions to commands, suggestions, and other stimuli, to be studied later by interested psychologists. Amateur theatrical productions, amateur voice and screen tests, recording of school events and more effective visual education are some of the more obvious possibilities which the new development opens up.

Visual Aids for Reading Tests

As a result of the experimental work done by Dr. E. A. Betts while he was director of the Shaker Heights Reading Clinic, the "Betts Ready to Read Tests" have been developed through the cooperation of the Keystone View Company. The tests were constructed on Keystone stereoscopic slides and used in a telebinocular, a modification of the familiar stereoscope. This instrument is adapted ideally for binocular tests of visual functions as it separates the fields of vision and permits the left eye to see only its half of the slide and the right eye its half. The eyes function simultaneously while the vision of each eye is being studied.

A series of eleven visual-sensation and perception slides provide tests of binocular acuity, right-eye and left-eye acuity, depth perception, binocular vision, and fusion, using simple pictures which the child can interpret to the examiner. Ten oculomotor and perception slides provide tests to determine the child's habits of perception and monocular and binocular reading tendencies, and serve to indicate the type of remedial instruction needed. By means of such tests, the teacher can readily analyze children's reading disabilities. The keeping of the child's record is explained and the method of interpretation is provided in the manual which accompanies the tests.

The complete "Ready to Read" equipment is now available from the Keystone View Company. It is a contribution to the cause of efficient learning which deserves serious consideration by every school administrator.

Work-Play Home Training Unit

Teachers and educators had a hand in the development of a new work-play home training unit which has just been placed on the market. It consists of a blackboard, drawing board, walleasel and work bench so combined as to form one neat, compact fixture. So designed that children can make use of its various features to do arithmetic, spelling, writing and other homework on the blackboard, sketching and painting on the drawing board, sculp-

The Wallezl used as a drawing board.

ture and manual exercises on the work bench, this home fixture brings together the means of self-entertainment and self-training so desirable in the modern technique of teaching.

The designers of the unit have named it The Wallezl. When the first model of The Wallezl was exhibited at the National Education Association Convention, it won much applause from prominent teachers and educators. Many of their suggestions were incorporated into the product as it was developed to its present form.

The frame of The Wallezl is mounted flat against the wall at any convenient position in the home. Within this frame, the slate blackboard is held rigid. The work bench hangs vertical from hinges and is brought into use by supporting it horizontally on brackets swinging out from the frame. Against this base, the reversible blackboard can be propped so that the cork-surfaced drawing board is held firmly at a correct angle. The equipment includes a metal paint tray suspended from the front edge of the work bench when in use, and containing seven pots of water colors.

Though designed primarily for children from nursery to high school, The Wallezl in actual practice has been found very useful to adults, especially professional men and women. Teachers themselves find this equipment handy and practical. Both the school and home units of this reversible blackboard are distributed by Austral Sales Corporation, New York City.

Victor Silver Anniversary

Victor Animatograph Corporation's celebration of its 25th Anniversary brings to mind the many outstanding achievements of this pioneer organization in the non-theatrical motion picture equipment field. Alexander F. Victor in 1910 perfected and patented the first portable suit-case motion picture projector. Since that time the company's policy of progressive pioneering has brought about many of the industry's most important innovations, improvements and refinements. Over two hundred features of camera and projection apparatus are Victor inventions. In 1923 Mr. Victor designed and manufactured the first 16 mm. camera and projector, a development of great significance to the educational field since the advent of the 16 mm. classroom teaching film proved an important step forward in visual teaching practice. Mr. Victor conceived the optical reduction printer by means of which 35 mm. pictures are reduced to 16 mm. His researches in color and in sound were the bases for many important developments in these fields. Very interesting, in considering the many conspicuous accomplishments of Mr. Victor and his company during the past quarter century, is his statement that "there is as much ahead of us now in the movie field as there was twenty-five years ago."

For Making Home-Made Slides
GLASSIVE — an abrasive for making your own ground glass slides from plain cover glass for a fraction of a cent each. 50c a package.
CELLOSLIDE—Eliminates the necessity of writing on glass. Takes ink better than glass. 500 sheets for $1.00.
(Dealers Wanted — Write for terms)
TEACHING AIDS SERVICE, WABAN, MASS.

An Amazing Screen Bargain!
9'x9' Screens for $14.50
Regular $60.00 Value!
Metal Roller for Screen, $4.50 Extra
Made of perforated mat white material. For sound or silent projection. Equipped complete with pole ready for hanging —cheap enough to cut up for class room work.
This is a special and limited offer. Take advantage of this ridiculously low price before the supply of these fine screens is exhausted.
ALFRED D. HORNSTEIN
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SCARBORITE TRADE MARK TRANSPARENT COLORS
BRILLIANT TRANSPARENT COLORS For Painting on Glass, Cellophane, etc.
Ideal for pupil-made lantern slides and a revelation to all lovers of color.
Send 10c in stamps for lantern slide of color samples.
SCARBORITE COLORS, Scarborough-on-Hudson, NEW YORK

16 mm. EXCLUSIVELY
Sound and Silent Projectors
Sound and Silent Cameras
Distinctive Titles
Negative Developing—Positive Printing
Special discounts to educational institutions.
J. C. HAILE & SONS
Motion Picture Dept.
215 WALNUT ST. CINCINNATI, OHIO

100 FILM COMPANIES IN 1
A New Service
Select from 2500 educational films in our hand book.
We ship from your nearest possible distributor at his regular rates.
We serve entire U.S.

Send 35c stamps for the 1935 illustrated film handbook.
INTERNATIONAL EDUCATIONAL PICTURES, INC.
40 Mt. Vernon St., Boston 8 W. 40th St., N.Y.C.

Here They Are

A Trade Directory for the Visual Field

FILMS

Araneff Film Associates (3, 6)
1345 Argyle St., Essanay Studios, Chicago
(See advertisement on page 52)

Bray Pictures Corporation (3, 6)
729 Seventh Ave., New York City

Eastin Feature Films (4)
(Rental Library) Galesburg, Ill.

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Eastman Kodak Co. (1, 4)
Teaching Films Division
Rochester, N. Y.
(See advertisement on page 57)

Edited Pictures System, Inc. (1, 4)
330 W. 42nd St., New York City

Erpi Picture Consultants, Inc. (2, 6)
250 W. 57th St., New York City
(See advertisement on page 29)

Guy D. Haselton's TRAVELETTES
7901 Santa Monica Blvd., Hollywood, Cal. (1, 4)

Ideal Pictures Corp. (3,6)
30 E. Eighth St., Chicago, Ill.
(See advertisement on page 56)

International Educational Pictures, Inc.
40 Mt. Vernon St., Boston, Mass.
(See advertisement on page 59)

Modern Woodman of America (3, 4)
Rock Island, Ill.

Pinkney Film Service Co. (1, 4)
1028 Forbes St., Pittsburgh, Pa.

Ray Bell Films, Inc. (3, 6)
2269 Ford Road., St. Paul, Minn.

United Projector and Films Corp. (1, 4)
228 Franklin St., Buffalo, N. Y.

Universal Pictures Corp. (3)
Rockefeller Center, New York City
(See advertisement on page 54)

Wholesome Films Service, Inc. (3, 4)
48 Melrose St., Boston, Mass.

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

MOTION PICTURE MACHINES and SUPPLIES

The Ampro Corporation (6)
2839 N. Western Ave., Chicago.
(See advertisement on page 30)

Bell & Howell Co. (6)
1815 Larchmont Ave., Chicago, Ill.
(See advertisement on inside back cover)

Eastman Kodak Co. (4)
Rochester, N. Y.
(See advertisement on outside back cover)

Edited Pictures System, Inc. (1)
330 W. 42nd St., New York City

Erpi Picture Consultants, Inc. (2, 6)
(Western Electric Sound System)
250 W. 57th St., New York City
(See advertisement on page 29)

J. C. Haile & Sons (6)
215 Walnut St., Cincinnati, O.
(See advertisement on page 59)

Herman A. DeVry, Inc. (3, 6)
1111 Center St., Chicago
(See advertisement on page 32)

Holmes Projector Co. (3)
1813 Orchard St., Chicago
(See advertisement on page 51)

Ideal Pictures Corp. (3, 6)
30 E. Eighth St., Chicago, Ill.
(See advertisement on page 56)

International Projector Corp. (3, 6)
90 Gold St., New York City
(See advertisement on inside front cover)

Motion Picture Accessories Co. (3, 6)
43-47 W. 24th St., New York City.
(See advertisement on page 55)

RCA Victor Co., Inc. (5)
Camden, New Jersey.
(See advertisement on page 49)

Regina Photo Supply Ltd. (3, 6)
1924 Rose St., Regina, Sask.

S. O. S. Corporation (3, 6)
1600 Broadway, New York City
(See advertisement on page 53)

Sunny Schick, National Brokers (3, 6)
407 W. Washington Blvd.,
Fort Wayne, Ind.
(See advertisement on page 56)

United Projector and Film Corp. (3, 4)
228 Franklin St., Buffalo, N. Y.

Victor Animatograph Corp. (6)
Davenport, Iowa
(See advertisement on page 34)

Weber Machine Corp. (2, 5)
59 Rutter St., Rochester, N. Y.
(See advertisement on page 55)

Williams, Brown and Earle, Inc. (3, 6)
918 Chestnut St., Philadelphia, Pa.

SCREENS

Da-Lite Screen Co.
2721 N. Crawford Ave., Chicago
(See advertisement on page 53)

Alfred D. Hornstein
29 E. Madison St., Chicago, Ill.
(See advertisement on page 59)

Motion Picture Accessories Co.
43-47 W. 24th St., New York City.
(See advertisement on page 55)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

SLIDES and FILM SLIDES

Conrad Slide and Projection Co.
510 Twenty-second Ave., East
Superior, Wis.

Eastman Educational Slides
Iowa City, Iowa

Edited Pictures System, Inc.
330 W. 42nd St., New York City

Ideal Pictures Corp.
30 E. Eighth St., Chicago, Ill.

Keystone View Co.
Meadville, Pa.
(See advertisement on page 53)

Radio-Mat Slide Co., Inc.,
1819 Broadway, New York City
(See advertisement on page 56)

Scarborite Colors
Scarborough-on-Hudson, N. Y.
(See advertisement on page 59)

Society for Visual Education
327 S. LaSalle St., Chicago.
(See advertisement on page 33)

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 55)

Teaching Aids Service
Waban, Mass.
(See advertisement on page 59)

Victor Animatograph Corp.
Davenport, Iowa
(See advertisement on page 34)

Visual Sciences
Suffern, New York.
(See advertisement on page 56)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

STEREOGRAPHS and STEREOSCOPES

Herman A. DeVry, Inc.
1111 Center St., Chicago
(See advertisement on page 32)

Keystone View Co.
Meadville, Pa.
(See advertisement on page 53)

STEREOPTICONS and OPAQUE PROJECTORS

Bausch and Lomb Optical Co.
Rochester, N. Y.

E. Leitz, Inc.
60 E. 10th St., New York City
(See advertisement on page 52)

Regina Photo Supply Ltd.
1924 Rose St., Regina, Sask.

Spencer Lens Co.
19 Doat St., Buffalo, N. Y.
(See advertisement on page 55)

Williams, Brown and Earle, Inc.
918 Chestnut St., Philadelphia, Pa.

16 MM. TITLES

J. C. Haile & Sons
215 Walnut St., Cincinnati, O.
(See advertisement on page 59)

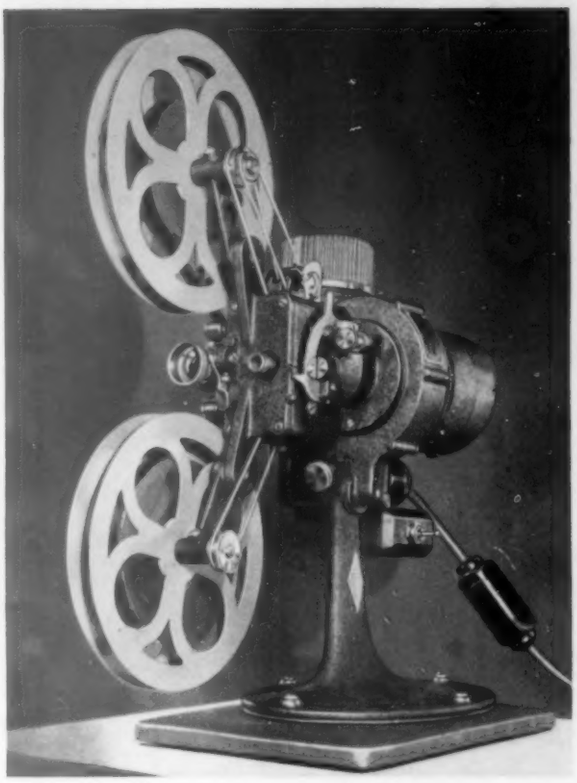
REFERENCE NUMBERS

(1) indicates firm supplies 35 mm. silent.
(2) indicates firm supplies 35 mm. sound.
(3) indicates firm supplies 35 mm. sound and silent.
(4) indicates firm supplies 16 mm. silent.
(5) indicates firm supplies 16 mm. sound-on-film.
(6) indicates firm supplies 16 mm. sound and silent.

Continuous insertions under one heading, $1.50 per issue; additional listings under other headings, 50c each.

Now-

a 500-Watt Filmo school projector for only $125



Years ago, Bell & Howell set out to give America's schools the finest 16 mm. projection equipment that could be built, and at a price that schools could afford to pay. That this objective was achieved is evidenced by the thousands of Filmos now in school service.

Now, in the new Filmo S Projector at $125, Bell & Howell offers American schools a plus-value unequalled in the field. The Filmo S is basically the same as the Filmos which for a decade have led the advance in visual education.

Technical Excellence in Every Part

Illumination: 500-watt biplane filament lamp (750-watt at slightly higher cost). Direct illumination. Disk, focal-plane shutter. Adjustable reflector. Reflector and condenser instantly removable for cleaning. Lamp quickly, safely replaced while hot.

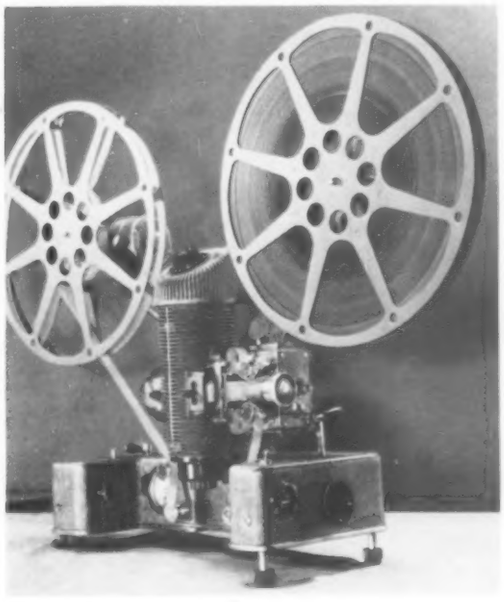
Film movement: Scientifically correct 9 to 1 ratio. No flicker, no wear on perforations. Side film tension—no surface scratching. Large sprockets.

Interchangeable lens: The standard 2-inch lens may be interchanged instantly for a lens permitting shorter throw in cramped quarters, or for one permitting long auditorium throws.

Capacity: 400 feet of 16 mm. film.

Other features: Automatic rewind, reverse, "still" projection, manual framer, helical gears, strong die-cast aluminum-alloy frame, conveniently placed controls, double-tooth shuttle.

Models: Filmo S, 500-watt line voltage lamp, $125; Filmo ST, 750-watt line voltage lamp, $140; Filmo SU, 750-watt lamp, variable resistance and voltmeter, $165. Case, $10 extra.



The New Filmo Auditorium Projector Model 130—1000-Watt

The Filmo Auditorium Projector, with 1000-watt illumination, will project 16 mm. motion pictures in the largest school auditorium with a brilliance and perfection not surpassed by usual 35 mm. equipment. New streamline base with low center of gravity, 1600-foot film capacity, separate take-up motor, film cooled and humidified during operation. Price, $385. Case, $27.50.

The Bell & Howell Filmosound for Sound-Picture Production

The foremost achievement in 16 mm. sound-picture equipment is the Filmosound — engineered on the most advanced principles. The Filmosound is distinguished by its brilliant projection, its fidelity in sound reproduction, and its simplicity and dependability. The Filmosound is available to schools on a rental basis. See your dealer or write for complete information.

New Filmo 129 Projector, 750-watt illumination, 1600-foot film capacity, $185 including case. Filmo JS 750-watt Projector, fully gear driven, $280.

Filmo at the N. E. A. Convention

Visit the Bell & Howell booth, Nos. A49-51, to the right of the main entrance, at the N. E. A. Convention in Atlantic City, February 23 to 28.

BELL & HOWELL *Filmo*

PERSONAL MOVIE CAMERAS AND PROJECTORS

1817 Larchmont Ave., Chicago; New York, Hollywood, London (B & H Co., Ltd.) Established 1907.

Double
PRECAUTION

WHENEVER you order motion pictures that are to be projected without a booth, do these two things: (1) Specify Eastman Safety Film...the film that involves less hazard than so much newsprint paper. (2) Look for the protecting words, *Eastman ... Safety ... Kodak*, throughout the transparent margin of each reel before you show it. This double precaution will safeguard your audience, projectionist, and building. Eastman Kodak Company, Rochester, N.Y. (J. E. Brulatour, Inc., Distributors, New York, Chicago, Hollywood.)

EASTMAN
Safety Film